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**Over the Moon: Extended-Cycle Contraception and the Recent
Evolution of Medicine and Womanhood**

by

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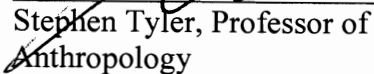
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Abstract

Over the Moon:

Extended-Cycle Contraception and the Recent Evolution of Medicine and Womanhood

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This dissertation is based on seventeen months of ethnographic fieldwork that followed the development and diffusion of extended-cycle hormonal contraception, or birth control that is designed to eliminate monthly bleeding. It encompassed several sites and multiple constituencies: a clinical trial, documented medical conferences, users, potential users, and refusers of the pharmaceuticals, along with key academic and popular proponents of their adoption. Extended-cycle contraception is a critical topic because this new generation of pills, IUDs, shots, and implants is not only refiguring the length of women's cycles, but it is also augmenting the extent to which its users' bodies are medicalized, or subjected to a type of manipulation and regulation that was previously impossible. No longer just for pregnancy prevention, these regimens are increasingly touted as elective enhancement technologies that may improve on the human design, on the one hand, and as crucial preventative medicine for diseases such as reproductive cancers, on the other hand. Remarkably, these pharmaceuticals are as socially complex as they are chemically—they may facilitate the renegotiation of constructions of womanhood, nature, and progress.

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Table of Contents

Abstract	ii
Acknowledgments	iii
Table of Contents	vi
List of Tables	vii
Chapter One/The Introduction: <i>The Problem, the Methods, the Biases, and the Plan</i>	1
Chapter Two: <i>The Medicalization of Menstruation, Hormonal Contraception... and Society</i>	29
Chapter Three: <i>The Incarnation of Risk and the “Postmodern-Paleolithic”</i>	55
Chapter Four: <i>Anthropological Fantasies in the Debate over Continuous Contraception</i>	97
Chapter Five: <i>Continuous Contraception and the Transformation of Gendered Relationships</i>	117
Chapter Six: <i>The Survey</i>	162
Chapter Seven/Concluding Thoughts	183
Bibliography	188
Interviewee Data Table	197
Interview Questions	199
Survey Forms	202

List of Tables

Table 1	Frequency of Reported Ages for Female Participants	164
Table 2	Frequency of Reported Ages for Male Participants	164
Table 3	Frequency of Reported Ethnicities for Female Participants	165
Table 4	Frequency of Reported Ethnicities for Male Participants	165
Table 5	Frequency of Reported Majors for Female Participants	166
Table 6	Frequency of Reported Majors for Male Participants	166
Table 7	Comparison of Completed Degrees with Intended Degrees Reported as a Percentage of Total Women	168
Table 8	Comparison of Completed Degrees with Intended Degrees Reported as a Percentage of Total Men	168
Table 9	Percentage of Women Who Were Using the Following Methods of Birth Control Regularly at the Time of the Survey	170
Table 10	Frequency Distribution of Female Responses Regarding Menstrual Discomfort	171
Table 11	Frequency Distribution for the Most Common Menstrual Symptoms	172
Table 12	Frequency Distribution of Female Responses for the Various Reasons to Suppress Bleeding, as Reported by Those Currently Using Extended Regimen Pills	173
Table 13	Frequency Distribution of Female Responses for the Various Reasons to Suppress Bleeding, as Reported by Those <i>Not</i> Currently Using Extended Regimen Pills	173
Table 14	Frequency Distribution for Female Responses Regarding the Evolutionary Advantage of Menstruation	174
Table 15	Frequency Distribution for Male Responses Regarding the Evolutionary Advantage of Menstruation	174
Table 16	Frequency Distribution for Female Responses Regarding the Function of Pill Periods	174

Table 17	Frequency Distribution for Male Responses Regarding the Function of Pill Periods	175
Table 18	Frequency of Female Responses Regarding the Naturalness/Alterability of Menstruation	175
Table 19	Frequency of Male Responses Regarding the Naturalness/Alterability of Menstruation	175
Table 20	Frequency Distribution of Female Responses Regarding Anthropological Findings	176
Table 21	Frequency Distribution of Male Responses Regarding Anthropological Findings	176
Table 22	Frequency Distribution for Female Responses Regarding Cycle Rate Reduction	177
Table 23	Frequency Distribution for Male Responses Regarding Cycle Rate Reduction	177
Table 24	Frequency Distribution of Female Responses Regarding How Many Periods Women Should Have Per Year	178
Table 25	Frequency Distribution for Female Responses Regarding Sexual Experience	179
Table 26	Frequency Distribution for Male Responses Regarding Sexual Experience	179
Table 27	Interviewee Data	197

The Introduction: The Problem, the Methods, the Biases, and the Plan

I hate having a week out of my month taken away from me.
[S20]

This dissertation is an exploration of the expert discourses and personal attitudes impelling—but also inhibiting—the popularization of continuous contraceptives, which are otherwise known as extended-cycle, extended-regimen, or cycle stopping hormonal contraceptives—and even menstrual suppressants. Inspired by both early human and posthuman imaginaries, concepts which will be explained in full in this dissertation, medical menstrual suppression is a most paradoxical and thus meaningful medical and consumptive practice. As continuous contraceptives become more accepted and as opinions of these pharmaceuticals become increasingly polarized, they will not only intensify the medicalization of women's bodies but may also facilitate the renegotiation of constructions of womanhood, nature, and progress.

Although menstruation is frequently inconvenient and sometimes even debilitating, it does not have to be. With the marketing of a new generation of hormonal contraceptive regimens, it is becoming increasingly normal for women to use birth control to manipulate their cycles, even to the degree that monthly bleeding is suspended. Continuous contraception can potentially prevent absenteeism and/or reduced performance at work or school that is due to incapacitating menstrual and pseudomenstrual symptoms—which can be caused by traditional birth control regimens. Additionally, it may eliminate the need to purchase and use pads, tampons, pain relievers, and other supplies. It can also alleviate the emotional distress that some women experience when their hormones fluctuate. Moreover, it can prevent

to menstruate or to have “pill periods” every month. “Pill periods” are the contrived bleeding episodes that occur when contraceptive hormones are temporarily stopped, during the pharmaceutical’s built-in hormone free interval, or decreased, during a reduced-hormonal interval. The reduction of exogenous hormones creates the “pill period.” Pharmaceutically-induced bleeding episodes will be discussed more fully in the second and third chapters.

After describing why menstruation and pill periods are often negative experiences—and ones that women still generally eschew preventing on a regular basis—I will describe my approach toward data collection and analysis. In short, I have adopted the “social worlds approach,” a “theory-methods package” (Clarke and Star 2007) that I will describe in detail, to understand how information about these pharmaceuticals is being shared across multiple sites and among an assortment of constituencies whose stakes in the debate over continuous contraception vary considerably. This approach influenced the methods I eventually adopted—namely interviewing, participant-observation, and surveying—and how I used them.

Once I have detailed my methods, I will discuss my biases as a researcher and will provide a description of each of the remaining chapters. Although I will conclude this dissertation with a discussion of my quantitative findings, it is qualitative rather than quantitative data—interview passages in particular—that will shape the majority of this exposition. I will include many direct quotes from my interviewees, in this introduction and throughout the dissertation, because their words are always so candid and colorful (and sometimes shocking and/or hilarious). All of the interviewees are labeled chronologically after their quotes; “S20” for instance,

women's subjection to old yet ever pertinent menstrual taboos and stereotypes. Most interestingly, some medical researchers theorize that with the invention of the right hormonal contraceptive formula, a woman who suppresses menstruation for years could potentially reduce her risk for developing breast cancer (Gladwell 2000; Spicer and Pike 1993; Leslie Miller, interview, July 30, 2009). Despite all of these potential benefits, menstrual suppressants are highly controversial—indicating that these pharmaceuticals are problematic in ways that not even their meticulous warning labels can explain.

This introductory chapter will start with an exploration of women's feelings towards monthly menstruation—specifically the negative¹ sentiments that have contributed to the unparalleled success of the pill² and its derivative forms, including those that are designed to suppress monthly³ bleeding. Additionally, this introduction will examine a principal reason why many women who repeatedly experience menstrual/pseudomenstrual discomfort or even debilitation refuse to regulate their bodies' hormonal fluctuations. Many of my interviewees support the near universal misconception that women must suffer—that blood and pain is our destiny despite the growing number of treatment options. Accordingly, the majority of my diverse group of interviewees, whose opinions of hormonal contraception are wide-ranging, choose

¹ This dissertation will also include many passages from interviews that portray menstruation as a positive experience.

² Throughout the dissertation (except when discussing the survey), I will refer to the birth control pill as “the pill” rather than “The Pill”—I will not make it a proper noun, as some other scholars and journalists routinely do. If I did, I feel that I would need to capitalize “the ring,” “the patch,” “the IUD,” “the implant,” “the shot,” etc. These devices rarely appear as proper nouns even though they are derivatives of “The Pill.” Thus all of these devices, including the pill, will be treated as common nouns from here onwards, mostly for purposes of convenience but also to ensure that each of these devices receives equal recognition.

³ Some women are “irregular” and do not menstruate every 28 days or thereabouts. The term “monthly” is used for convenience to describe the average cycle of a healthy American woman of childbearing age.

who is quoted above in what is the first of many interview passages, stands for “subject 20,” or the twentieth person that I interviewed. When describing her reasons for including personal narratives so prominently in her work, Rogia Mustafa Abusharaf explains, “I employ these narratives to provide an understanding of the ritual as presented in women’s own words, which reflect their own truths” (2001:122). In other words, I cannot put words in anybody’s mouth this way.

The Dark Side of the Moon⁴: The Problem with Menstruation (and Contrived Bleeding Episodes)

Although anthropologists and feminists endeavor to show us that negative views of menstruation are not as universal as once assumed (Buckley and Gottlieb 1988), menstruation is and will probably always be characterized as a curse; hence the rise of its deliberate suppression. Many of my interviewees indicate that menstruation is still viewed as “dirt” today, not only by men but by menstruators themselves. According to Mary Douglas, menstrual blood is widely perceived as “dirt,” or “matter out of place,” a concept that I will return to in the next chapter (1966). During menstruation, what we think is meant to stay inside the body enters the outside world; the private and public spheres bleed together in multiple, alien ways. Our orifices fail to contain our bodily fluids, which is but one type of “failure” that occurs during menstruation. Emily Martin has focused on menstrual metaphors and argues that in the Western imaginary, we commonly describe menstruation as failed production (1999:98). She argues that we also substitute the machinelike

⁴ “Moon,” here and in the title of the dissertation, alludes to menstruation and menstrual cycling, to which it is etymologically and rhythmically connected.

rhetoric for economic terms, and in those cases, menstruation is often depicted as a wasteful expenditure, as if women are tight budgets. We use the same vocabulary to describe menopause, a time during which the body begins to “waste” away. The “body as machine” and “menstruation as waste” metaphors will be discussed more fully in Chapter Four. Whether describing it as dirt, mechanical failure, or bad financing, the majority of my subjects portray menstruation as a whole—or at least some aspect of it—pejoratively. It is possible that my interviewees were more negatively biased toward menstruation than most women and that they chose to participate in my research in order to vent their frustrations. I do not think that this is the case, however, because the informants do represent a variety of viewpoints, and they do so in numbers that reflected my expectations based on years of research and conversations with friends and acquaintances.

Negative attitudes towards menstruation start early; menarche gives many women an off-putting first impression of menstruation. A few of my subjects’ initial experiences with menstruation were shocking, especially those who were younger than average when this pubertal milestone occurred.

I was nine, so I was terrified... We were on a road trip and stopped to use the bathroom—I felt this wetness, and I don’t know what’s going on. So my mom had to tell me all about it. She never prepped me for it before then, so it was complete shock. [S36]

I know the first time I was like, “What’s happening to me?” I’ve heard stories from friends who started and thought they were dying because they had no idea what was going on. [S11]

I had a very old-fashioned mother... Mom didn’t say a word to any of us about it. We saw the sixth grade filmstrip, and that

was it. [I thought during] my first period, “What is going on?” I knew that’s what it was, but it was just like, “Why???” [S28]

Others were embarrassed or even ashamed.

Had I not gotten it in seventh grade at the talent show in front of God and everybody, [I] probably would have had a little more positive thoughts towards it. But the fact that I walked around school all day with a giant bloods stain on my shorts! [S31]

I just used toilet paper, [instead of a pad] and I didn’t tell anyone for like ... a year. [S43]

Some felt that they had done something wrong or were physically wounded.

I was ten. I didn’t really have a clear concept of what a period was... I thought I must have rode my bike a little bit weird or something... I thought something happened in terms of it being an injury. [S39]

I remember feeling like I did something bad. It was in seventh grade... I just remember feeling like I was in trouble, that I was bad. [S13]

Another felt all of these emotions, plus alienation from her father.

When I got my [first] period, it was so traumatic. It was awful. I was on vacation actually with my parents... I didn’t really know what was going on... What is it?... My parents were making a huge deal out of it. And I was just embarrassed. I didn’t want anybody to know. I was really young—that’s the other thing... I was eleven. And my friends weren’t getting it yet so I felt odd and out of place. At that moment, I realized that I was different from my dad... I was like I cannot tell him about this. It doesn’t feel right. [S16]

Because negative experiences with menarche shape many women's first opinion of menstruation, it is not surprising that many of my informants' negative or mixed feelings would continue. More so than menarche, however, the persistence of menstrual symptoms negatively impacts a woman's view of her cycle. Although there were a few exceptions, almost all of the women I interviewed reported regularly occurring symptoms when not using hormonal contraceptives. As we will see, the same was overwhelmingly true for the survey takers. For some of the interviewees, the discomfort was mild and easily managed. For others, like the two women with endometriosis and the two with polycystic ovary syndrome, menstruating was far more complicated. Even if the women did not have a diagnosable menstrual disorder, they were often suffering on a continual basis. For instance, some women become very sensitive and prone to crying around their periods.

Everything starts to bother me. Everything! And I get really sensitive, and I cry over anything... Sometimes I just flip out. [S16]

I see those "save the children" commercials with the flies in the children's eyes... [I end up] balling. Balling! Two weeks ago I would have flipped the channel. [S17]

I get tired of crying at commercials and being angry for no reason! [S34]

While some cry, others do not feel like themselves.

There's just this space of time where I don't feel like who I really am... The couple of days before my period... I'm a raging monster. [S17]

I just felt like a totally different person. It was terrible. It was like I was actually pregnant [this subject describes how she felt after stopped using continuous contraception]. [S1]

A few bleed too much, and a couple even pass out from all of the blood loss.

By day two, [it's as if] somebody let Hoover Dam Open... The period itself is just god-awful... [It is] seven days of just bleeding buckets, literally. [S31].

I had a hormone imbalance, and I would pass out. I injured myself at one point, quite badly... I had to get five stitches in my chin ... [and I had] chipped teeth, a black eye, [a] bruised jaw bone, and banged up knees. [S9]

I'm anemic. I actually passed out from it—from losing so much blood in school. [S40]

Some face unpredictability.

Sometimes I have two periods in one month, and I'm like what did I do to deserve this? What did I possibly do? [S17].

[I can be] a little bit of an emotional wreck. Lots of frustration when you're not expecting it and you constantly have to use stain remover. [S21]

Others struggle with menstrual products.

[Tampons] were very painful... They always seemed to get stuck halfway. I was in my twenties before I could comfortably use [them]. [S12]

If you could imagine a fifth grader lugging Tylenol in the book sack to school—pads, the whole nine yards. [S32]

A few reported migraines.

When I have a migraine... I stay in bed all day. [S25]

I had a really, really bad headache last week, and I spent the whole day Wednesday in bed, hanging by the neck because of that. [S28]

These last two interviewees have had to miss work due to menstrual-associated migraines, and they are not alone. Many of my subjects reported missing work, school, and social and athletic events because their menstrual symptoms—most oftentimes abdominal and pelvic pains—were debilitating. Although the quotes begin to sound similar, I offer many (but far from an exhaustive list) of my interviewee's descriptions of their menstrual-related debilitation, in order to give a sense of just how many women hurt so badly that they have become immobilized. Although Hitchcock (2008) argues that the extent to which menstruation is a problem is exaggerated in popular culture, based on my interviews, I must disagree. Here are a few examples indicating just how unbelievably extreme the pain can be:

I had a car accident, and I broke my leg—this part of my leg. I have a rod in my leg, a pin in my knee, and a screw in my hip. I can show you the scar on my hip here. My menstrual pain is worse than the pain that I experienced recovering from that. I've got a lot of tolerance for pain, and even getting over a Cesarean section both times with my kids—that's not a big deal. The menstrual pain, that's a big deal. [S44, endometriosis sufferer]

I literally thought my pelvis was falling out. I was able to go home... I really thought I was dying. I was ready to go to the emergency room... [S31]

Some have to miss school or work.

Sometimes I would go to school—especially in the winter—and I would just kind of like smuggle a hot water bottle under my jacket. But if I didn't have something warm against my stomach, or was lying down in the fetal position, it was pretty much impossible to get through the day. [S10]

The worst is whenever I'm at school and it starts. My concentration will be fine for the first couple of classes. Then the last classes I might just have to skip and go home, if the cramps really are that severe, yeah... I just kind of sit, and I feel helpless. [S39]

I had to skip class and go to the nurse because the cramps were so bad that I couldn't even stand. [S16]

It interfered with school because I was on these pain killers for it, for the pain... [S8]

I've had to miss work; I've had to miss school... It just seems like every other month. I was bleeding so bad and so heavily and cramping so bad I had to just lay in bed, turn the lights out, and lay in bed in a ball. Put a heating pad on and just lay still. It hurt to walk; it hurt to pick anything up. [S44]

Others must avoid physical activities.

Generally my period kind of makes me weak. Like the first day of periods? You ever get that where you're like, I know I should go to the gym, but I just can't really lift my thumb right now? [S17]

When I'm on my period I prefer not to do sports. [S16]

I won't work out for the first couple of days of it. [S9]

A few miss out on fun.

My friends would go swimming or to the movies, and I was in too much pain. I couldn't do it. [S46]

I stayed in bed for like a day and a half.... maybe once every three or four months, I miss out on doing something... [like] going out and having fun, doing something that I really want to do. [S28]

There are maybe three times out of the year where my cramps debilitate. Where I'm like, oh, no! I'm not going. I'm not doing anything. [S17]

Subject 20 perhaps best encapsulates problem that menstruation can be in the following brief statement, which opened this chapter:

I hate having a week out of my month taken away from me.
[S20]

Why do women allow menstruation and pill periods to take precious time away from them? Why do they endure it when most of them have a choice in the matter? There are some straightforward answers to these questions: for instance, some women, such as regular smokers and those who are obese, might not want to use hormonal contraceptives due to increased health risks. Likewise, many otherwise healthy women experience side effects while taking the pharmaceuticals that are less bearable than menstrual symptoms. In addition to these clear-cut answers to the questions listed above, there are also some very complicated ones, which I will explore later when I return to the concept of “dirt” in Chapter Two and when focusing on how we negotiate living in a risk society in Chapter Three. Another answer, which I will begin to discuss here, deals with the belief that women must suffer—that suffering is character building or virtuous, particularly when it pertains to our physiological health. When it comes to childbirth, for instance, we frequently praise new mothers who forgo epidurals for their courage and stoicism (see, for example,

Vivilaki and Antoniou 2009). I first began to contemplate this notion that “women must suffer” when a very shrewd interviewee spelled it out for me. She said:

I never subscribe to the idea that the blood—the lining must come out every month. If you talked to my mom or my grandma—it’s a purification. You have to get the bad stuff out. But it seems to me that the reason that that allegedly would be bad stuff is tied into some ideas about womanhood in general. But it’s not just for purification, there’s the suffering component. [There is a] women must suffer to atone kind of idea. Yeah, I really don’t want to atone for anything. And I really don’t want to suffer... [S32]

In addition to this interviewee, another [S31] made me question the extent to which menstrual taboos really relate to purity and sanitation. She emphasized how much blood is splattered across our TV sets and movie screens on a daily basis. Not only is non-menstrual blood accepted in popular culture, but so is urine, a bodily fluid that is associated with the vagina. Therefore, it seems that the bleeding and vaginally-related aspects of menstruation are not necessarily what make menstruation so unmentionable. As subject 31 indicated, the cycle has become associated with atonement.

But from what do women need to atone? It could be original sin inherited from Eve. More likely, however, it is the age-old perception that women are lacking and need to prove their worth. Ever the second sex, women still endeavor to catch up to number one. In order to catch up, women must master their leaky, supposedly ill-equipped female bodies. So-called shortcuts, which come from exogenous sources such as medications, are increasingly acceptable; however, the authenticity of this type of body mastery can always be called into question. Women’s “weakness” and

the supposed willpower that some of them use to overcome it will be discussed at length in Chapter Five.

Leslie Miller, an eminent researcher of menstrual suppression and the founder of NoPeriod.com, describes her patients' misgivings to me, which sound very familiar. She tells me, "I think that a lot of them feel a lot of guilt. They think that they are supposed to have periods... They have this really strong belief that they have to have them" [S19]. Another gynecologist, subject 18 agrees, informing me that until she started practicing, she had no idea how pertinent the cultural mandate was to see blood on a monthly basis. Some of my informants have divulged that fact to me:

...[T]o be in control of it is nice. But on a deeper level, I do feel like you shouldn't be in control. [S24]

I don't like the thought of stopping [it], even though I hate it. [S31]

Grace and MacBride-Stewart (2007) have explored how, in the absence of a visible pathology, women with chronic pelvic pain normalize their suffering. They argue that there is "no analogy in medicine" (62) to women's normalization of pain that is associated with their reproductive functioning. Their interviewees frequently describe their pain as women's lot, and many of my participants' rhetoric is almost identical:

It's just something that comes with being woman. It may be a tough break... [S17]

After so many years, well I've had mine most of my life at this point. It's just part of being a woman. [S12]

In this first part of the introduction to the dissertation, I have shown why menstruation is a problem and some of the most obvious reasons why women are hesitant to eliminate it and receive all of the potential physical, mental, and social benefits that could at least hypothetically ensue. In the next section, I will discuss my methodological strategy before revealing more about the methods themselves and about who my interviewees and survey takers are.

The Methodological Strategy

In their introduction to Adele Clarke's chapter on the social worlds approach, editors Anselm Strauss and Juliet Corbin argue that "[g]rounded theory methodology and methods are so much a part of some researchers' thinking that they don't bother especially to address them when writing up their research" (Strauss and Corbin 1990:15). I am not one of these researchers and considered from the start of my fieldwork how my research design would impact my understanding of the cultural significance of continuous contraceptives. As both an anthropologist and a feminist studies researcher, I was naturally drawn to an investigative strategy that would emphasize the actions of a diverse variety of subjects whose relationships to the pharmaceuticals would differ significantly. Namely, my subject base would consist of users, potential users, and refusers of the continuous contraceptives, along with key academic and popular proponents of their adoption.

I began with actor network theory (ANT). Like many of its critics, I found ANT to be too narrowly focused on experts' role in the production/circulation of knowledge (Oudshoorn and Pinch 2008). I needed a conceptual lens (Clarke 1990)

that would consider the contributions of the so-called marginal figures, such as college and graduate students—people like me, to whom I would have the most access. I did not just choose to engage this group because of access issues, however. These people are unquestionably significant to the topic at hand—they are continuous contraceptives' target population. In addition to its potentially too narrow focus, I was also dissatisfied with ANT's focus on the impact of non-human actors. To me, treating the contraceptives as actors would have made my research feel more science and technology studies and less like anthropology.

The theory/methods package (Clarke 2005) that I would choose, the social worlds approach, is designed to facilitate an understanding of how diverse constituencies of people—such as my assortment of medical doctors, anthropologists, and students—are in fact in conversation (Clarke and Star 2007; Garrety 1997; Strauss 1984). To utilize this perspective, the researcher considers how her research topic, e.g. continuous contraception, is understood across as many domains as she feasibly can, in order to understand how information about that topic flows and about how its meaning is shared or restricted. Like me, Adele Clarke (1990) and Karin Garrety (1997) have applied the perspective to medical topics, which are the most popular areas for utilizing social worlds and social worlds-type frameworks. Social stratification is highly visible within the medical community, making it fertile ground for analysis that does not accept hegemonic authority at face value.

I was especially disposed toward social worlds because it would allow and account for the effects that individual, non-hegemonic actors can have on social systems. According to Anthony Giddens (1991), individual people can and do affect

social systems. My research supports this ontological position from the start, which is why I consider the positions of a variety of subject types. By following continuous contraception from research labs, to scholarly and popular publications, to the everyday narratives of young women, I ultimately learned that information about menstruation and birth control does not funnel down unidirectionally to women from medical experts. Instead, knowledge is exchanged reciprocally among the diverse constituencies⁵ and is co-produced by many people of varying rank. By favoring certain discourses among the many that are steering the debate over suppression, both experts and non-experts alike are deciding which are most salient. Through consideration of how young women are shaping our perceptions of continuous contraception, I attempt to show how they are agents of their own health. I will consider the effects of multiple social worlds throughout the dissertation but particularly in Chapter Four, which was essentially conceived of as an exercise of the social worlds approach.

The Methods Themselves

In order to reach a variety of constituencies, I had to use a variety of methods, specifically interviewing, participant-observation, and surveying. I interviewed young women and gynecological experts, I conducted participant-observation on a clinical trial composed of researchers (doctors and nurses/research coordinators) and research participants (premenopausal women), and I surveyed college students, graduate students, and young professionals (both women and men). I employed

⁵ There are many other constituencies who affect menstrual suppression discourse; this is certainly not an exhaustive list, but I had to limit the research scope for the sake of manageability.

these methods for nearly two years⁶ of fieldwork beginning in April 2008 and ending in March 2010. While each of the methods was essential to the completion of my fieldwork, I learned the most from the interviews and will draw on them most heavily in this dissertation. Thus I will discuss this method in the greatest detail below.

The Interviews

I conducted a total of fifty interviews—forty-two with young women and ten with medical professionals (two interviewees fell into both categories). My interviewees included two of the most prominent supporters of menstrual suppression, Patricia Sulak and Leslie Miller, who are practicing gynecologists and researchers. Sulak's Temple, Texas-based research group has studied extended-regimen contraceptives for the past twenty years. Sulak, who asserts, "I want on my tombstone, 'Eliminated Monthly Periods,'" estimates that her team at Scott & White has conducted more biomedical research on these pharmaceuticals than any other in the world (Sulak, educational seminar, September 9, 2008). Miller is also responsible for substantial work on menses suppressing drugs, and she currently manages the popular website NoPeriod.com. Two more gynecologists/gynecological researchers, who will remain anonymous, were interviewed, in addition to two of Sulak's nurses/research coordinators, a general practitioner, a breast cancer researcher, a fertility specialist, and a university wellness center director. After transcribing each

⁶ I conducted fieldwork on a part-time basis when the clinical trial began—I wanted to be present for its duration. I was not ready to begin interviewing, however, so I conducted fieldwork on a part-time basis at first. It would be part-time again at the end of the two-year period, when the interviews and trial were complete but the survey was still ongoing. I spent seventeen months actively engaged in fieldwork.

of my recorded⁷ interviews, I selected the most pertinent passages from each transcription. Then I coded each of those selections using QSR NVivo 8, a data analysis program for qualitative research. In total, I made eighty-three codes related to menstrual suppression discourse. Sample codes include “allusions to ‘primitive’ women” and “metaphors comparing the body to a machine.” Most selections were coded more than once, and in sum, there were 1,242 coded selections. I completed all of the interviewing, transcribing, and coding myself.

To understand users’ and potential users’ attitudes towards continuous contraception, I also interviewed undergraduates, graduate students, and young professionals whose average age was twenty-five. The semi-structured, open-ended interviews lasted between twenty and ninety minutes, with an average duration of thirty-five minutes. I located the majority of these young women when distributing a survey to classes at two Houston universities.⁸ The first of these schools, the University of Houston, which the majority of the interviewees attended, is a large, public university that is commonly regarded as one of the most ethnically diverse campuses in the nation. The women from this institution who volunteered to be interviewed reflected this heterogeneity. Rice University was the second school. In contrast to UH, Rice is a small, private school and has a diverse though mostly Caucasian student body.

⁷ One interviewee would not permit the use of a recorder.

⁸ IRB protocol, including the procurement of informed consent, was followed for each institution involved.

In order to familiarize the reader with my interviewees, here is salient information about them. More subjects⁹ (44%) were moderate or undecided than decisively “anti-suppression” (27%) or “pro-suppression¹⁰” (29%). The only notable correlation I found between suppression stance and cultural identity was with respect to race/ethnicity. Hispanic women, of whom there were eight, were highly likely to be against suppression. African-American women, of whom there were seven, were divided over the issue. Even so, like the Hispanic women, none of them were suppressing, and only one had reported using cycle stopping contraception in the past. Other participants of color were the only representatives of their demographic. Only one woman openly discussed how her sexual orientation, which was homosexual, might affect her views; thus I cannot begin to hypothesize about how sexuality affects attitudes. Anti-suppression women of multiple faiths mentioned not wanting to defy what God gave them, which suggests a correlation between religiosity and suppression stance.

Although I did not normally ask any interviewees to discuss their faith or their upbringing—unless they brought it up first—a number of the young women made reference to God or to their religious/cultural upbringing when explaining their stance toward continuous contraceptives. Below are several passages that mention how God, religion, and/or cultural affiliation affects their and/or their peers’ attitudes towards contraception—continuous regimens in particular. I share this relatively short list of interview revelations in order to further familiarize the reader with my

⁹ The health care professionals who did not share their personal experiences are not included in this statistic.

¹⁰ By “pro-suppression,” I mean these interviewees were, at the very least, confident that cycle stopping contraception is not unhealthy or “wrong” in any way. Notably, none of these interviewees were anti-period; no one believed that suppression would be the most appropriate choice for everyone.

informants and to reveal their styles of disclosure. Significantly, several of the attitudes presented are stereotypical, a few are antitypical, and some are a blend of both.

I interviewed several Mexican and Mexican-American women consecutively who spoke to how their culture/religion (Catholicism) affects how they and others with similar backgrounds view contraception and the medicalization of menstruation. Here is an excerpt from one of their interviews:

It's not right because it's not being open to life... I don't believe that people should use contraception... If I got married, I would try to... not use contraception... because it's not natural, and it's not right. [S43]

Throughout her interview, a Muslim woman shared how she is traditional (e.g. she is remaining abstinent until marriage), yet nontraditional in her attitudes towards family planning and health care practices. Ultimately, she is open to suppression.

I am Muslim; that's why I wanted to do the interview... We're conservative on some issues... I do know plenty of other families where it would be taboo for a girl—even if it was going to help her health-wise—to regulate her menstrual cycles... But I think [that with] birth control, nowadays, you just kind of have to adjust your way of thinking a little bit... Health is more important than religion in... [a] sense, in that I wouldn't mind taking the contraceptive if I knew that it would help me health-wise... [S39]

An African American interviewee reflected about how her race might affect her negative feelings towards suppression.

... [B]lack women ... maybe [have] different attitudes towards periods. [It is] something that doesn't necessarily need to be

suppressed. [We are like] “Oh, it’s just here; it (menstruation/a bleeding episode) came.” And the idea of maybe taking birth control to prevent pregnancy? Yeah. But to control periods? Not so much.

One Chinese European American informant described how each of her parents has affected her exceptionally convoluted attitudes towards biomedicine. She does not find her parents’ views to be irreconcilable.

My father, he just retired... He was in the research department of a big pharmaceutical company for maybe like fifteen years. So I mean, I’ve always understood the complexity of drug development and [how] tedious the screening and the trials [are]... [On the other hand] [M]y mom’s Chinese, so there’s a lot of holistic medicine in my family, which I support... [I support what is] [p]robably...part of the Asian philosophy, not to mess with the body’s natural cycles. [S23]

Several women made reference to God in our interviews but did not talk about their presumably (though not definitively) Christian faith at length.

I think women are born to have a period. That’s why mostly everyone—mostly all women have periods. I think it’s natural because—not to bring religion in it—but that’s what God gave us. [S30]

A nurse/research study coordinator revealed what she believes to be the most common cause of her patients’/research subjects’ biases against continuous contraceptives, while revealing a few of biases her own.

Usually I think they’re really conservative. Very conservative. And I think they’re just very rel—I wouldn’t even say religious. I would say strict, Bible-thumping people. But that’s fine. No problem with that. If they want to do that, they’re just... you know... [S3]

Although one's upbringing and world views are influential, the clearest factors shaping a woman's stance are her personal experience with debilitating menstrual symptoms, which appeared to be highly correlated with negative attitudes toward menstruation. A woman's depth of knowledge of how hormonal contraceptives work is also a highly significant factor. My analysis of the interview materials strongly suggest that the more intense and painful a woman's symptoms, the more inclined she was to manipulate her cycle. Likewise, women who knew more about how hormonal contraceptives work appeared more willing to consider the benefits of suppression. These factors are likely correlated—women who experience intense menstrual symptoms often research their treatment options, and in the process they generally discover the potential benefits of hormonal regimens.

The most surprising aspect of the interviews was discovering how flexible hormonal contraceptive users were with regard to changing their regimens. Most (68%) of these women had tried multiple brands. They even experimented with these regimens by omitting the hormone free interval; the majority (57%) of the women whose primary reason for using hormonal contraception was not to reduce menstrual discomfort or irregularity had tried “skipping” the this interval.

Please see the appendices for a table enumerating my interviewees and listing their occupation type, age, race/ethnicity, hormonal contraceptive history, and whether or not that have purposely skipped pill periods. The appendices also include the lists of interview questions that I asked young women and health care providers.

Participant-Observation

When initially seeking a fieldwork site in 2007, I considered setting up temporary residence in Philadelphia, Washington DC, and even Salvador, Brazil. A senior researcher in one of these locations informed me that I did not need to go nearly as far as I was planning to—that exactly what I needed was in Houston’s backyard. After hearing about Sulak’s work in Temple, Texas, I started to notice her name in the citations of many of the papers that I was reading. I contacted her immediately and, just a few months later, began conducting participant-observation on her newest clinical trial. This trial would be titled “Prevention of Menstrual Migraines: Effects of Continuous Oral Contraceptives in Combination With Prophylactic Frovatriptan use During Hormone Free Intervals.” Basically, Sulak and her team would be testing to see if menstrual suppression could prevent the migraines that some women experience as symptoms of menstruation and pill periods. They were also checking to see which migraine relievers would work best with continuous contraceptives.

During the study I commuted from Houston to Temple to provide Sulak with assistance at subject recruitment events and to help her research coordinators in the office—whether it was managing a recruitment booth, calling enrolled subjects, performing data entry, or filing forms. I was involved with the clinical trial at all stages and worked with everyone involved, from the principal investigator, to the co-investigator, the statistician, the research coordinators, the medical doctors, the nurses, and the subjects and potential subjects involved. Most of Sulak’s quotes are from the clinical trial’s recruitment sessions; it was at these events that she appealed

to the greatest variety of discourses in order to promote suppression. It was at these events, too, that I would come to appreciate just how many people are essential to the completion of quantitative medical studies and could most easily observe the interactions of multiple social worlds.

The Surveys

Initially conceived of as a service to Sulak for allowing me to conduct participant-observation and interviews with her and her team, I created two surveys (a women's version and a men's version) on continuous contraception. They would provide Sulak with information for the Worth the Wait sex education program that she runs—it requests information about one's experiences with birth control and sexual activity. For me, it would not only provide settlement, so to speak, with Sulak for allowing me to study her trial, but it would expand my base of research participants and would allow me to extend my hypotheses, which I will discuss in the sixth chapter. After Sulak and I negotiated the questions we would ask, we titled the surveys “College-aged Women and Men's Attitudes Towards Extended Regimen Oral Contraceptives.” The survey would be an extension of the 2006 study, “Attitudes and Prescribing Preferences of Health Care Professionals in the United States Regarding Use of Extended-Cycle Oral Contraceptives” (Sulak, Buckley, and Kuehl 2006).

Beginning in June 2009 and ending in March 2010, I distributed 455 surveys in eighteen anthropology, English, and Lifetime Physical Activity Program classes on the campuses of Rice University, the University of Houston, and Reinhardt College,

which is located in Waleska, GA.¹¹ These classes were largely taken as electives and were composed of students from a variety of majors, who demonstrated a range of opinions regarding the topics in question. Again, the findings of this survey will be discussed in Chapter Six. The survey forms are located in the appendices. My male participants' surprisingly enthusiastic attitudes towards their survey will be discussed in Chapter Five when I analyze the relationship between men, women, and contraception.

My Biases

This section is brief—not because I do not have any biases but because I do not want to become so reflexive that this dissertation becomes autobiographical. Although reflexivity is essential for the kind of qualitative research that informs the majority of this dissertation, I think it can be a mistake to turn ethnography into memoir. Thus I will share only the biases that I deem extremely relevant to my research as a whole here, and I will treat specific cases where my biases may have affected my data and analyses as they arise throughout the dissertation.

I have had a hate/love/hate/love relationship with continuous contraception. When I started my research on this subject in 2006, I hardly knew anything about it—except that I did not like the idea of it. Years later, when severe menstrual cramps nearly defeated me at the 2007 meeting of the American Anthropological Association, I decided to give the continuous contraceptive Seasonale a try. Thirty

¹¹ I have connections at Reinhardt College because it is near my hometown, which is why I selected it as a site to distribute the surveys. I administered the surveys myself, which was the case at every campus, when visiting in the area.

months and ten pill periods later, after having had a very positive experience with the pharmaceutical, I decided that I wanted to be de-medicalize myself as part of some kind of body reclamation project. One month and one real period later—the same month that I ended my fieldwork—I had the worst cramps of my life, in public of course, and vowed that I would stay on Seasonique¹², the new Seasonale, until I wanted to start a family. So for the duration of the interviewing phase of fieldwork, I was taking Seasonique myself and was secretly pleased when an interviewee supported their use. Regardless, Rose et al. (2008) found that women are not easily swayed in their opinions of menstrual suppression—not even after having been deliberately primed with negative information about menstruation. If I showed my personal bias, it was inadvertent. Moreover, I felt that I was always able to empathize with the naysayers, too, having held the same opinions for a long time. Ultimately, I think that the fluctuation of my views enhanced my ability to connect with each of my informants and enriched my understanding of the complex nature of the research topic.

Besides disclosing my wavering feelings about continuous contraception and non-compulsory pharmaceuticals in general, I must mention that a few of my informants were friends or friends of friends. Nevertheless, these women's views varied considerably, and their interviews and surveys were not conducted in any special fashion. Quotes from their interviews appear no more frequently than do

¹² Seasonale and Seasonique are designed to reduce a woman's annual number of menstrual cycles from an average of thirteen to four. These products are both from Barr Pharmaceuticals; the latter has generally replaced the former. Unlike the Seasonale regimen, which included a hormone free week every three months, the Seasonique regimen includes a reduced hormone week every three months (Mayo Clinic).

those from the interviewees that I had never previously met—no subset of interviewees appeared more relaxed, clued-in, or open than the rest.

Introduction to the Remaining Chapters

This dissertation is organized into seven chapters, including the introduction and conclusion. The chapter following the introduction will explore the recent medicalization of hormonal contraception. It will show how these pharmaceuticals are evolving according to individualized preferences and how this evolution is a function of medicine's increasing hegemony. The chapter concludes with a look at how this medicalization is impacting society as a whole. The third, and most theoretical, chapter will argue that continuous contraception is part of a project that is neither modern nor postmodern in design. This project is primarily characterized by its tendency towards (de)construction: while theoretical limits are being deconstructed, new concrete risks are constantly being constructed. Ultimately, this chapter is about the intensification of regulation/control in a late modern risk society. The fourth chapter will focus on the deployment of anthropological references in menstrual suppression discourse. It will show how, via the social worlds approach, these ideas are circulating among a diverse constituency of actors. It will also contrast anthropologically inspired images of the "primitive," healthy amenorrheic woman with a far more established promotional trope—the postfeminist. In the end, this chapter will show how the promoters of menstrual suppression are perhaps encouraging an unattainable feminine ideal. The fifth chapter will continue to examine how continuous contraception may—or may not—facilitate the renegotiation

of the female gender and gendered relationships, particularly those involving women and 1) doctors, 2) men, 3) other women, and 4) the self. It ultimately shows just how powerful pharmaceuticals can be, not just in the physiological sense, but the sociocultural. The sixth chapter will discuss the results of my survey, which show how continuous contraception is perceived on a larger scale, not only with young women but with young men, as well. With this information, I can confirm and extend my hypotheses. The concluding chapter will make conjectures about the future of hormonal contraception and the medicalization of women's bodies.

Chapter Two: The Medicalization of Menstruation, Hormonal Contraception... and Society

The more I hear about how the pill came about, [the more] I think... the idea that it (a bleeding episode) has to happen every twenty-eight days... is a sort of a manufactured idea. [S14]

This chapter explores the concurrent medicalizations of the menstrual cycle and hormonal contraception, specifically as they relate to the latest FDA-approved pharmaceutical regimens. These regimens are designed to either elongate the intervals between bleeding episodes or to eliminate endometrial shedding altogether. Continuous contraception works to not only prevent pregnancy but to synchronize women's cycles to a rhythm that is not necessarily their own. Previous scholarship on the topic has focused largely on the medicalization of menstruation and segued into a discussion of agency and biopower. By and large, social scientists and humanities scholars have stopped short of analyzing the actual devices that deliver the contraceptive/cycle-regulating hormones and are directly responsible for altering the chemistry of women's bodies. This chapter will explore the designs of these apparatuses in detail, based on users and prescribers' first-hand experiences with them.

First, I will briefly discuss the history of the pill. This account shows that the bleeding episodes that women experience on traditional hormonal contraception has always been arbitrary; its developers knew from the start that from a biological standpoint, monthly bleeding was not compulsory for women who use hormonal contraception. Then, I will discuss "skipping," or omitting the pill's monthly hormone free interval, which induces fake menses, or what is commonly called a "pill

period.” Skipping is rarely if ever discussed in the social scientific literature on menstrual suppression, and such an omission is remiss considering the commonality of the practice. It was by far the most popular form of menstrual suppression among my interviewees, who represent a cross-section of these pharmaceuticals’ target population. Heeding the advice of confidants from multiple social worlds, including doctors, nurses, and female family and friends, women have been taking control of their hormonal fluctuations and skipping the contrived bleeding episodes for decades now, long before the pharmaceutical industry would facilitate this practice. As we will see, some institutions are still creating obstacles for menstrual suppression.

In addition to the pill, this chapter will explore a variety of hormone delivering devices. I will discuss the regimens that are commonly known as the IUD, the ring, the patch, and the shot. Moreover, I will show how these products’ specific designs serve to potentially decrease the debilitating effects of women’s monthly “burden” while increasing the medicalization of their bodies. In addition to these methods, this chapter will investigate the potential regimens of the future, which could be adapted to, or even designed for, the individual woman. Finally, I will explore how the medicalization of the fertile female body is occurring with medicalization of a larger body, i.e. the city, in what is a most extreme but authentic example of how medical culture is encroaching on our lives in new ways, and in effect, how it is becoming omnipresent throughout society. Incidentally, research on menstrual suppression figures prominently in this discussion; Patricia Sulak’s well-known research, which she has conducted in the small city of Temple, Texas,

exemplifies how widespread the promotion and practice menstrual suppression could become.

A Brief History of the Pill

Because its two main ingredients, ethinyl estradiol and progestin, have become the most widely consumed prescription drugs in the world (Oudshoorn 1994), the pill is more responsible for the medicalization of our bodies than any other pharmaceutical in history. By medicalization, I refer to the process in which non-medical occurrences and practices become incorporated into the domain of medicine. Since its inception, the pill has controlled more than just birth. In addition to inhibiting ovulation and therefore fertilization, it impedes menstrual bleeding, or the whole cycle, as well. In 1958, Gregory Pincus wrote that he and his co-inventor of the pill, John Rock, had the ability to make women's bleeding cycle any length they wanted (Pincus 1958). In fact, the first hormonal contraceptive that they designed did not induce periodic bleeding episodes. Its test subjects expressed anxiety about the loss of their menses, however, inciting the duo to manipulate its formulation to include a fake period (Oudshoorn 1994). Like the initial users, Rock had personal reasons for wanting to build a bleeding episode into the hormonal contraceptive regimen. This devout Catholic scientist sought to improve the results of the rhythm method of birth control without appearing to eliminate any supposedly natural and potentially life-giving events (Gladwell 2000). The prototype that he and Pincus would produce, in which the user spends three weeks on hormones and one week off

of them, would establish the conventional design of hormonal contraceptive regimens for at least a half century to come.

At least until the late 1960s, when Depo-Provera appeared on the market (CWPE 2007), monthly menstruation seemed necessary from a cultural standpoint. At least presumably, women wanted to see blood every 28 days so that they felt normal, healthy, and not pregnant—at the time, women would not have had access to reliable home pregnancy tests. Depo-Provera would be revolutionary in two senses; it frequently eliminates menstruation, and it is injectable rather than oral. With its eventual approval and fair degree of popularity, health care professionals realized that unlike Pincus and Rock’s test subjects, the next generation of women might want to take pills that suppress ovulation *and* menstruation. Still, although it has been revolutionary, many women are hesitant to try Depo even today. As we will see in the next section, most of my hormonal contraceptive using subjects would prefer to use the traditional pill—but they oftentimes like to do so in nontraditional ways. Amazingly, pharmaceutical companies waited decades to begin packaging the pill as many women were already taking it, reifying the cultural belief that most women should experience monthly shedding. We will see later how many women are also reconsidering the oral standard for hormone delivery.

Skiping the Pill

Practicing physicians and nurses have understood the science behind the pill for years now, and many of them have been prescribing it as they see fit. Prominent promoter of continuous contraception, Leslie Miller, explains, “I was doing

continuous pills myself, and I was just like whoa, wait a second! I'm doing this.

Why can't my patients do it?" [S19]. Thus they often teach their patients how to skip bleeding episodes when they coincide with important events, instructing them to omit the hormone free interval and begin the new package as soon as they finish week three of four of the last pack. Other physicians, such as subject 18, will only advise their patients on how to skip when asked. Although they do not know for sure how customary it is, all of the health care professionals that I interviewed are convinced that skipping is a widespread practice. In fact, it was the most popular method of medical menstrual suppression practiced among my interviewees by far. For that reason, I will share some of my informants' experiences with learning about how to skip here. Although it is not usually classified as a form of menstrual suppression, it should be because it is exactly that. Many women who skip on a fairly regular basis experience bleeding episodes as infrequently as women whose contraceptive packaging does not contain built in hormone free intervals every month. Because it is so common, this form of menstrual suppression should receive more social scientific attention; we should not assume that birth control is always used as directed when it is so frequently subject to either user error or purposeful manipulation.

In keeping with the social worlds approach to the understanding of knowledge production and exchange, in which the researcher considers the agency of different types of actors (including so-called "marginal" figures), I asked my informants how they learned about skipping. A few said that they learned from women with whom they were close. For instance, subject 15 learned from her friends, while subject 35 first found out about it from her stepmother. Subject five figured it out for herself.

I always used to skip the empty week, or the dead week. I'd just keep on taking the pills. I don't know if that was okay, but, I did it... I just did it [without talking to my doctor]...I just kind of figured it would work. 'Cause I was like, I don't feel like it this month. So I'm just going to keep on taking these [hormone pills]. [S5]

Another subject learned about skipping from her mom, who happened to be a nurse.

My mom, who worked labor and delivery before I was born, thought it was a great idea. When I was sixteen, my mother and I were on the same pill. So if I ran out, I could go and get her spare pack and vice versa... She's like, "I can plan vacations." ...Nurses have been able to do this for years. They knew. And keep in mind, nurses have also known about how to induce a period if you had a whoopsie, too... [S32]

While some women trust their family members, peers, and own intuition, others feel that they must consult their doctor before they initially skip the hormone free interval:

I usually do it for reasons of sex or travel... I kind of just follow my doctor's advice... I asked her if it was okay ... I didn't know really how to do it with the NuvaRing.¹³ And she told me how to do it. ...She didn't know of ... any harm of just skipping it all the time. I mean she wasn't saying it was a big bad thing to do. But she just said, "You might just want to do it on special occasions..." [S8]

While one subject's hometown doctor was against it...

She kind of yelled at me about not taking my pills, about skipping my placebos... I mean she's older, and... I guess she's from China. She kind of has just sort of different ideas... [S10]

¹³ The NuvaRing is a vaginal ring that users insert themselves. The slow release hormones last for three weeks until the user (if using the pharmaceutical as prescribed) takes one week off before inserting a new ring (NCBI 2008).

... her physician at college was amenable.

And my doctor here had said to me, "It's not a real period anyway, so it doesn't really make a difference whether you get it or not." And I was perfectly comfortable with not getting it. So, I basically ignored her (the previous doctor) suggestion. Occasionally I'll get it just to sort of reassure myself that I'm not pregnant [or] whatever. But for the most part I'd rather just not bother with it. [S10]

Some physicians go so far as to write their prescriptions to include skipping.

"...[It] was actually noted in my chart that I was supposed to skip those [placebo pills], because that was the way that they were prescribed to me, to miss my period." [S1]

The previous subject did not encounter any problems with her pharmacy and insurance company when she tried to refill her prescription more frequently than every 28 days. Most of my informants who tried to refill their contraception too early did face difficulties, however, including the following subject:

I did do that (skipping) for a while, and at some point you're going to get to where your insurance company won't cover it... I could only refill mine every thirty days. So yeah, you run into a situation where you can't get your prescription. So that's why Seasonale makes sense to me. [S14]

This interviewee reveals a reason why pharmaceuticals like Seasonale, which is now generally prescribed as Seasonique,¹⁴ are convenient. With the way this version of

¹⁴ Seasonale and Seasonique were/are designed to reduce a woman's annual number of menstrual cycles from an average of thirteen to four. These products were/are both from Barr Pharmaceuticals; the latter has generally replaced the former. Unlike the Seasonale regimen, which included a hormone free week every three months, the Seasonique regimen includes a reduced hormone week every three months (Mayo Clinic 2008).

the pill is packaged to only include bleeding episodes four times a year, the user will not have to refill her prescription early in order to skip monthly cycling. Nor will she have to pay for placebo tablets, or “dead” pills, as subject five calls them. Here we see how the policies of pharmacies and insurance companies are impacting the rhythm of women’s bodies. Women who occasionally skip will sometimes opt for the continuous regimens in order to avoid refill problems. Moreover, users of traditional regimens, who might like to skip more frequently, are sometimes constrained in doing so because their insurance will not cover the extra pills. Altogether, the constraints on refilling hormonal contraception exemplify how the bureaucratization and the medicalization of women’s health are co-occurring.

Choosing the IUD, the Ring, and the Patch

Another market-driven reason why women choose menstrual suppressants over the traditional birth control pill entails cost-effectiveness; many of my informants who were concerned about expenses were interested in non-oral forms of hormonal contraception, especially the intrauterine device, or IUD. Both the IUD and the ring were surprisingly popular with my informants. I had not planned to discuss either method in my interviews nearly as much as I did, as both the hormonal version of the IUD and the ring are relatively new to the market. In fact, I did not expect to discuss IUDs at all; growing up, I associated them with either yesteryear or with newly industrialized countries like India.

When in New Delhi before graduate school, I assisted at a few free Pap smear “camps” for slum women. One woman, in her mid-thirties, explained her medical

history before having her first gynecological examine in almost two decades. She was never able to conceive a child, much to the dismay of her in-laws, who treated her poorly as a result. The gynecologist administering the Pap located the exact reason for her infertility—she had an IUD, which must have been inserted at her previous examination without her knowledge or consent. No one other than me seemed shocked that this could have happened. What is more, once extracted, one of the other volunteers accidentally knocked the bloody IUD across the floor. It landed a few feet from the check-in desk, and no one picked it up all day. The patient left happily, after enduring decades of infertility and abuse, perhaps on her way to new beginnings. This was my only experience with IUDs, and I was shocked when the first of quite a few of my subjects told me that she was interested in acquiring one of her own. What I had identified with much undue suffering was making a comeback in the US—and it was being touted as an instrument of liberation.

One of my subjects was unwilling to consider a hormonal contraceptive due to her distrust of the effects of exogenous hormones and was therefore seriously considering a copper IUD. This IUD would not have been too dissimilar to what I had seen on the floor in India. When asked if she would mind the potential disruption to her monthly bleeding, she said “...Oh my gosh! Some of the side effects of the copper ones intensify the side effects of a period. It’s like you’re having a super period...” [S17]. Despite her reservations about having a “super period,” she was considering this no-maintenance method above all of the others because she was preparing to spend a year in a developing country and did not want to become personally involved with its medical care. Ultimately, she decided against the IUD.

Ironically, as of this writing, she is pregnant and regularly visiting the OB/GYN in that country.

Sounding like the previous subject, another student about to travel abroad explained her preference for a Mirena, a popular new hormonal IUD:

[W]hen I'm traveling and making big life changes, which I'm going to be a lot in the next year, it can be easy to forget [to take my pills]... I'm pretty bad about remembering to take it, taking it on time, and all of that kind of stuff... [The IUD lasts] for five years. And if you decide you want to get pregnant, you just take it out. I mean not yourself... [S10]

She continues, describing how the IUD would ease more than just remembrance issues, “[A]nd it’s actually a lot more cost-effective in the long-run. I just know that over the next five years, I’m probably going to be switching health insurance about five times. And it’s just such a pain to figure out what the different coverage is, and dealing with it in France...” Again concerns about insurance coverage and refills influence a woman’s decisions regarding the management of her cycle. In addition to those reasons, her reservations about having to visit a doctor/pharmacy in a foreign health system affected her decision to consider an IUD, just as was the case with subject 17.

Similar to the way in which the pill carefully calculates the occurrence of bleeding, the IUD manipulates the cycle as well—although inadvertently so. My interviewees that were using or considering using the IUD favored this method of birth control primarily for its no-maintenance design and minimal disruption to their lives. Eventually, however, most IUD users develop a bleeding cycle that is not “natural” to them. As subject 17 described, bleeding could intensify when using a

copper IUD, resulting in what she called a “super” bleeding episode. On the other hand, as subject ten would state, the hormonal IUD can minimize or even suppress bleeding altogether. With her priority being convenience, subject ten welcomed menstrual suppression as part of the hormonal IUD package. Unlike any of the popular versions of the pill that are FDA-approved as of this writing, IUDs are not designed to impose bleeding at a certain regimented frequency, such as every 28 days. Nevertheless, these devices do modify women’s ordinary rhythms; they seem to nullify or to intensify them. IUDs are thus pivotal to the medicalization of menstruation, just as is the pill.

Because it is inserted into the vagina, the ring might appear to be more analogous to the IUD than the pill; however, NuvaRing’s instructions call for a hormone free week, making it more similar to the 28-day pill. More so than adherents to the 28-day pill however, many ring users feel that they are taking control of hormones’ dispersion. In addition to being able to skip the hormone free interval when they choose, ring users feel that they are limiting the reach of the exogenous hormones. They explain:

Hormonal pills affected me so much... [T]he ring is more *local* to the location where it’s supposed to be active. It wouldn’t get to my head as much. That was the reason we tried it. [S23]

I use NuvaRing because that’s the lowest hormone contraceptive—because it’s *local*. [S50]

A lot of people... who are concerned about getting cancer from the pill and things like that... feel a little bit more comfortable with the idea that it’s *localized* hormones. [S10, describing vaginal hormonal contraception, in general, i.e. both the hormonal IUD and the ring]

I stressed each subject's use of "local." For them, the word connotes "safety." Each of these subjects expresses fear about exogenous hormones and believes that the ring affords them the most control over the foreign chemicals. While menstruation is often viewed as "dirt" (Douglas 1966), or contamination to some, medicine is "dirt" to others. These subjects feel that by keeping exogenous hormones localized, they can minimize the extent to which their bodies as a whole are polluted by foreign substances. In keeping with the logic behind the Cartesian dualism, they believe that localized hormones will remain in the lower halves of their bodies, away from certain imperative systems, such as the nervous system and its seat, the mind. In sum, we see here how a woman might opt for a non-traditional method of hormonal contraception in order to try to minimize the medicalization of her body as a whole. The medicalization of her cycle will increase in a fundamental sense, however, as the hormone delivering device stays implanted within her body, rather than dissolving every day as is the case with a pill. The artificiality of hormonal contraception has become physically tangible with these devices and with the patch, as well.

I will not discuss the patch, Ortho Evra, at length because it was very unpopular product among my interviewees. Only two women reported to have ever used it, and they tried it out of desperation, specifically after not having much success preventing pregnancy using other methods, for one interviewee, and to reduce the pain associated with her endometriosis, for the other. Interestingly, the patch adheres to the outside of the body. One reason for this device's design surely relates back again to "dirt." With the patch, the hormone delivering mechanism stays outside of the body, creating an optical illusion in which the pollution (the hormones) does not

penetrate the skin, or cross the self/non-self barrier, as do pills, rings, IUDs, and shots, which are swallowed, inserted, or injected into the body. What is interesting about this design is that more so than any other hormonal contraceptive method, the patch signifies medical intervention to onlookers. The device is designed to look like a Band-Aid, as if the birth control user is healing a wound. Moreover, one of the two former patch users that I interviewed, subject 40, said, “I had to get surgical tape a couple times, tape it, [and] make sure it didn’t fall off.” Thus, it appeared even more like she was covering a lesion. Never before has a hormonal contraceptive been designed to signify treatment and thus medicalization so prominently—and perhaps been rejected so strongly as a result. Based on my subjects’ lack of enthusiasm for the patch, I think that it will continue to be an unpopular device. Women use hormonal contraception in order to gain a sense bodily mastery; they do not want to advertise their bodies’ permeability.

Opting for Depo-Provera

Although it was available to consumers before the hormonal IUD, the ring, and the patch, Depo-Provera is the hormonal contraceptive is among the most advanced in terms of its medicalization of menstruation, which the following discussion of its administration, side effects, and longevity in the body will corroborate. Although a few current and former Depo users used the word “love” to describe their feelings towards Depo, most of these women’s sentiments were at the other extreme because of the particular harshness of its potential side effects. One woman who had a positive first few years with Depo explained her reason for initially

trying it. She says, “It just seemed really convenient. I didn’t want to have to have pills around... because I was in high school.... I also worried about not taking it regularly or something, I think. And I heard Depo made you not have your period, which sounded nice,” [S8]. Along with the usual reasons of menstrual suppression and remembrance issues, this subject chose Depo primarily because it had no take-home apparatus for her unknowing parents to potentially discover—the needle and syringe used to administer the hormones do not leave the doctor’s office with the patient. Delivering the hormones is literally in a doctor or nurse’s hands rather than that of the user, making the dispensation of birth control a thoroughly medical experience.

Besides the fact that it is generally administered in a medical setting, the intensity of the Depo’s potential side effects may also make its user feel like a patient receiving treatment. Two women with severe but not unheard of side effects relate their surprisingly unpleasant experiences.

I only had one shot because it dried my skin out so bad. I didn’t know what it was at first. I was getting bloody noses, and my skin was—I could just go like this [touches forehead], and skin would be falling off my face it was so dry... and also I know someone else who did the Depo, and she started losing her hair. It was crazy, just really scary. [S24]

I had to start getting deep conditioning treatments at the salon to keep my hair. I mean I would shed like crazy. My nails got brittle so I had to... use the nail hardeners and stuff like that. And I can’t tell you how I know I know it, but I think that the way my body smells changed. It got stronger. [S32]

In these passages, we begin to see how severe the side effects of hormonal contraception are for some women, especially when they receive the hormones in

large quantities. Unlike the users of the ring, who esteemed its localization of hormones, Depo users are generally less anxious about the dispersion of exogenous hormones—at least in the beginning. After years of taking hormonal contraception, subject 24 had had enough of the side effects, primarily a decrease in her libido, and she switched to a barrier method.

Another common side effect of Depo-Provera is its delayed reversibility. One woman, whose menstruation actually returned relatively quickly for Depo user, explains her concerns. She said, “I would go off it, and it would take three months for me to get my period again... It’s a tough balance. I don’t want to feel like I’m so sterile. I still want to feel like a lady who can make babies if I want” [S8]. If the medicalization of the hormonal contraceptive user’s body could be quantified, it could be among the highest for the Depo and hormonal IUD user, based on the longevity of its effects. Instead of a few days maximum, as with the any of the variations of the pill, one deposit of Depo hormones stay in the system for three months¹⁵. Thus it is among the most extreme form of hormonal contraception short of the contraceptive implant, which will not be discussed further because it is not very popular among the general population. None of my subjects reported to have used it or expressed interest in future use.

Regimens of the Future

Contraceptive regimens will continue to co-evolve with societal preferences and technological advancement. When I asked hormonal contraceptive experts what

¹⁵ Depo-Provera may not last three months in women who are obese.

the birth control of the future would look like, Leslie Miller [S19] said “individualized,” Thomas Kuehl, Sulak’s frequent collaborator [S7], said “bottled,” and Sulak herself said “continuous” [S6]. All of these designs illustrate how birth control could become even more medicalized than it is presently. I will start with Miller’s vision and continue with that of Kuehl; Sulak’s influence will be discussed more fully in the next section, which focuses on the city in which she works, Temple, Texas. Miller and many other gynecologists and gynecological researchers often refer to hormonal contraception as “therapy,” a course of treatment that is usually tailored to the individual patient. After watching so many interviewees attempt to recount the various hormonal contraceptive brands that they had tried before finding success or renouncing this type of birth control altogether, I can understand why some physicians think that hormone treatment should be individualized. Subject 40 summarizes what I heard so many times after asking an interviewee about her hormonal contraceptive history: “I’ve been on so many I can’t remember.” When I asked subject 32 which brands she had tried, she began a very long exposition with “[l]et me tell you about the journey...” When it comes to hormonal contraception, women are their own guinea pigs. According to Miller, rather than consider how the individual woman’s body works, doctors frequently prescribe regimens based on personal biases, such as their relationships with certain pharmaceutical companies. She is adamant about overhauling the way that hormonal contraception is currently packaged and prescribed, and she argues:

You have to actually step outside of the box, to say well let’s treat this like any other health condition. And let’s individualize the therapy. If someone’s having seizures, well they would

never just treat that with brand products. They actually monitor the dose. You get blood tests—you make sure you have the adequate dose. They do evaluations, and they make sure you're not having seizures, and they adjust things. They individualize it. [19]

As Miller indicates, many different types of medicine are already individualized. In late modern, or contemporary, society, we increasingly treat consumption, which certainly includes medical consumption, as a means to attain self-identity (Giddens 1991). Because we are so invested in acquiring the specific goods and services that we feel may accentuate and perhaps even enhance our self-identity, it is only logical to assume that women would be very choosy about their contraception. In fact, women would probably want it more tailored to their individual needs than anything else, since birth control is such a personal matter. Even so, Miller's push to have hormonal contraception packaged for individuals has yet to be taken seriously. Pharmaceutical companies fund most clinical trials of hormonal contraception, and they continue to profit from standardized regimens. The research needed to learn how to commodify individualized therapy would be time-consuming and expensive. Miller's proposal titled "Induction of Amenorrhea With the Continuous Use of the Oral Contraceptive" would have tested the effectiveness of individualized therapies, but it did not receive the federal funding for which she applied (Miller 2006). Because they control the majority of the research being conducted, pharmaceutical companies will continue to dictate the design of hormonal contraception in the near future. They will make gestures to niche markets by tweaking the hormonal contraceptive regimen here and there, as long as doing so is profitable. However, they will only go so far and invest so much at a time.

Perhaps the NIH and the pharmaceutical industry are so slow to hasten the evolution of hormonal contraception because they do not prioritize women's everyday health as much as they should. Subject 32, a cancer researcher, points to the fact that women's health has always been understudied. She specifically discusses Hormone Replacement Therapy and the controversy regarding its risks. She, like many feminist-minded scholars, argues that medical research needs to focus on women more than it already does. Then the medical field can find the hormonal regimen that is safest for the individual woman, whether she is menstrual, menopausal, or somewhere in between. Notably, Miller does think that therapy will be individualized—some day. Niche marketing will capitulate to sub-niche marketing and so on, which will eventually lead to down to the individual and to individualized therapy. In the meantime, most women, but not all, must wait.

While the pharmaceutical industry may still be reluctant to re-conceptualize certain aspects of hormonal contraceptive packaging, some medical doctors are ahead of their time and are already individualizing therapy for their patients. Subject 32, the cancer researcher, tells me about her own experiences with hormonal contraception. Because of her medical conditions, her gynecologists have twice improvised her hormonal regimen to fit her needs. She used Depo-Provera for three years during her early twenties and had the injections repeated every nine weeks instead of every eleven to thirteen. She explains, "At the point where I went on Depo, I was then tipping at 200 lbs. And you know, that's kind of the threshold where they tell you it might not be as effective. It only lasted about nine for me. So they actually had to speed up my injection schedule." In her late twenties, she would develop

endometriosis, and that diagnosis would really complicate her contraceptive routine.

She states:

So at one point I was also on a hormone patch and the pill [and had an IUD]. Seriously I know. Patch, pill, IUD... I was on that [three-part regimen] for about six months, and that was the only thing that helped with the breakthrough bleeding [and the endometriosis]... I never figured out why the doctor decided on this course of treatment. It's very confusing. But eventually we engineered the way that I take the pill.

I was initially shocked that this subject was using three types of hormonal contraception at once: Ortho Evra, Seasonale, and Mirena. Her story exemplifies how creative some doctors can be when prescribing, challenging the limits that pharmaceutical companies have set. This subject was able to avoid the problems that could arise when filling multiple contraceptive prescriptions at once because her diagnosis with endometriosis permitted an aggressive use of hormones. Here we see one of the many ways in which hormonal contraception is used to treat a variety of conditions, which can be as severe as endometriosis and polycystic ovarian syndrome (of which there were two reported sufferers of each among my interviewees) or as ordinary as acne and bloating. The medicalization of menstruation occurs as a consequence. “Therapy” really is an apt name for these drugs; they offer so much more than just birth control. Moreover, it is not just the menstrual cycle that is subject to medicalization; the whole body can be affected.

Both Miller and Kuehl think that hormonal contraceptive “therapy” should come in bottles rather than blister packs. Again advocating personalized therapy, Miller states, “These need to be in bottles; these need to be like thyroid pills. We

need to individualize the therapy. This shouldn't be sold as these set regimen doses" [S19]. Kuehl thinks blister packs are somewhat juvenile—that they undermine a woman's intelligence, inferring that women have poor memories and that they are content to pay more for packaging that could be considered superfluous. Kuehl explains:

I take medicine for blood pressure... I take a pill every day. It comes out of a bottle... Why can't you sell oral contraceptive pills in a bottle? Why do you think you have to... punch them out every day?... It probably says what the companies think about women. They don't sell high blood pressure in bubble packs... You can figure out how to take it. You can follow the instructions on the side that say take every day until you have breakthrough bleeding...It makes perfect sense to me that you would do that. [S7]

Kuehl's idea made sense to him, but not me—not when the user is taking pills of varying dosages, as most oral contraceptive regimens contain placebo or reduced hormone tablets (and sometimes triphasics, or rows of hormone pills with ascending and then descending strengths). Nevertheless, Kuehl still thinks that birth control pills should come in bottles. Neither he nor Miller thinks that either hormone free or reduced hormone pills, which are built into the Seasonique regimen, should even be included. Kuehl says, "Why do you have to have placebo pills? Why don't you just have empty bubbles on those days, or say 'take this for three weeks, and then stop for a week and then start again?'" [S7]. Meanwhile, Miller says that she skips placebos when taking them herself. "I don't need it. I'll remember," she states. [S19]

After hearing so many women tell me that they favored the ring, the shot, or the IUD because they did not have to remember it daily, I have to disagree with

Kuehl and Miller. Women, like men, have a lot on their minds and can easily forget which pill to take which week. Having a blister pack in the shape of a monthly calendar or a dial facilitates proper dosing. Still, I do concede that blister packs and dials entail extra packaging, and bottles are cheaper. Perhaps women could at least have the option as to whether their pills come bottled or blistered. Regardless of who is right, the desire to put hormonal contraceptives in bottles like thyroid pills and blood pressure tablets shows how the birth control of the future could look even more like medicine. Many contemporary birth control packages are designed to pass as makeup compacts; taking birth control pills out in the open is stigmatized. Even so, both women and men use all sorts of decorative pill boxes to mask a variety of medications. Perhaps in the future, when pills are even more ubiquitous than they already are today, there will be no need to hide them. We may recognize the medicalization of the body, specifically the menstruating body, as standard procedure.

Sulak's version of the perfect hormonal contraceptive routine does not include pills of variable dosages; instead, the user receives the same concentration of hormones every day. Of course, both Miller and Kuehl advocate the use of continuous contraception to women for whom this regimen would be a good fit, too. According to Kuehl, Sulak coined the term "continuous contraception." I have already discussed how what I call "skipping" works, and continuous contraceptive regimens operate the same way but without monthly built-in hormone free or reduced hormone intervals. In the next section, I will discuss more completely the significance of Sulak's work, which, for the past two decades, has focused on menstrual suppressants. We will begin to see how the regimens of the future

exemplify a larger-scale medicalization; medical culture is increasing in and spreading from some seemingly unlikely places.

The Medicalization of a Larger Body: Temple, Texas

Initially, I found it hard to believe that the team that had conducted the most biomedical research on the pharmaceuticals that I was studying (Scott & White, address, Sept. 9, 2008) was located in a city of which I had never heard. The leader of this team, a world-renowned contraceptive guru, was also the head of a sex education program called “Worth the Wait.” Moreover, named among the “100 Top Hospitals” in US by Thomson Reuters (2010), the main campus of the hospital in which this researcher works, Scott & White, features a buttered popcorn and candy stand—in its lobby! The place where I would conduct my participant-observation seemed to be so full of contradictions. Tucked in Bell County between better known Austin and Waco, “the wildflower capital of Texas” first appears to be but the humble home to 110,000 central Texans (Temple Chamber of Commerce 2004a). Even so, the city hosted over *a million* outpatient visitors to its health facilities in 2003—the year of the most recent survey. The Chamber of Commerce boasts that:

Temple offers an abundance of superior health care facilities and representation in nearly all medical disciplines. Over 700 physicians, surgeons and specialists are involved in the many service areas. Temple has one physician for every 142 persons, while the State of Texas has one physician for every 617 persons (2004b).

In fact, unofficial guides frequently boast that the city has more physicians per capita than any other in the United States. Every time that I have driven into Temple from Houston, I have asked myself how this little, seemingly middle-of-nowhere place could be the most medicalized city in the US—and probably the world. When approaching it via TX-36 N, the first image of the city appears as the horizon reaches toward a summit, at the top of which presides the main campus of Scott & White. This facility is not only the physical center point of the city, it is also its economic base. There is little doubt that Temple revolves around Scott & White, its largest, most prestigious medical institution and the place where I would conduct many of my interviews and all of my participant-observation work.

Recruitment for the clinical trial I that I assisted with lasted much longer than the research team had ever anticipated. There were many factors responsible for the holdup, a couple of which were startling. For one, an alarming number of women could not participate in the study because their BMIs were over thirty-eight (which the hospital's highly conspicuous promotion of junk food could only have exacerbated). As far as the nurses and I could tell, the obesity epidemic is nearly pandemic in Temple, this most medicalized US city. Secondly, Sulak's previous trials and clinical practice were proving *too* successful. Too many potential participants were already using continuous contraception. One of Sulak's research coordinators explains, "The reason it is taking so long to enroll for it (the new clinical trial) is everyone is [already] on continuous birth control pills... It's going to wind up killing us... It's a good reason why we can't [find] the subjects..." [S2]. After

twenty years of near constant recruiting, the next generation of women was not maturing fast enough to create a new pool of potential research subjects.

In order to reach the enrollment quota, the research team had to extend their search for subjects both outside the city limits—and inside their own walls. While Sulak's research team expanded their search to neighboring cities, most of the eventual recruits would eventually be found via Scott & White's internal list server. Like many investigators at Scott & White, Sulak and her team advertise their studies internally, and consequently, many of their trials' subjects come from within the research center itself. Women who already spend time at Scott & White's campus on a regular basis can participate without having to travel too far or enroll in an unfamiliar process.

Because Temple residents are not only patients, but increasingly employees and research subjects, as well, they are citizens of Scott & White as much as they are their city. David Westbrook (2003) argues that in the globalized world, our allegiances are less locationally based and increasingly market-driven. Obviously, the dominant market in Temple is medicine, which has had to extend itself beyond the city in order to find bodies—the city is short on bodies, both literally and figuratively. According to Scheper-Hughes and Lock (1987), there are three types of bodies—the physical, the social, and the political. I think there are fewer in Temple, as the individual body and the body politic have become fused; the physical flesh that is operated on also performs all of the institutional operations. In other words, the first and third bodies are in some ways one and the same. This blurring of the self

and the institution will happen in a place where the medical industry is so prominent and where its residents are so medicalized.

So full of paradoxes, this small Texas city, which embraces medical culture more comprehensively than any other that I have visited or in which I have had a medical internship (which includes such global cities as New York, New Delhi, and Tokyo), really offers a unique preview of the medicalized metropolis of the future. Because the medical industry is continuing to boom despite the recession that began in the late 2000s, and because the medicalized body is becoming increasingly normal, I predict that more and more cities will revolve around their health facilities. As a medical anthropologist, I was privileged to be able to conduct field work in what is already one of the most medicalized places in the world, on one of the most medicalizing pharmaceuticals in the world (Oudshoorn 1994).

Conclusion

This chapter has shown how birth control is continuing to come under the authority of the pharmaceutical industry, physicians, and other medical personnel. Unlike age-old methods simply requiring abstinence and/or provisional barriers, the latest generation of birth control involves altering the chemistry of the body, i.e. impeding ovulation, stopping menstruation, inducing bleeding episodes, and rendering oneself vulnerable to a gamut of potential side effects. In other words, pregnancy prevention now frequently entails the wholesale medicalization of the body. Although the invention of the pill is arguably the most significant milestone in the medicalization of the fertile female body, the subjectification of this body to

exogenous hormones has not reached its zenith. While the dosage of the pill has dropped since its first appearance, the latest regimens are designed to be taken more regularly. From three weeks on and one week off to three months on and one week partially off, the pill is becoming a constant presence in women's bodies. In addition to a new generation of the pill, a profusion of hormone delivering devices that are not administered orally are appearing on the market. These products are specialized to almost every preference and reflect the fact that medicine is an industry—an industry that will cater to every profitable niche. As we saw with the example of Temple, Texas, the intensification of the medical industry is affecting more than just the physical body of the contraceptive user. Collectivities of bodies are increasingly dependent on medical culture, and in the end, the medicalization of menstruation and hormonal contraception is not an occurrence only affecting women; it is part of a phenomenon that is affecting all levels of society.

Chapter Three: The Incarnation of Risk and the “Postmodern-Paleolithic”

I call it the modern solution to the modern problem. [S19, Leslie Miller, MD, on continuous contraception]

Ever since I began studying and comparing birth control regimens years ago, I have wondered if hormonal contraceptives are perhaps a bit heavy-handed. I understand that the occurrences of ovulation and insemination can be sporadic and unpredictable, and that continuous contraception can provide almost foolproof protection when used correctly. Still, it seems at least a bit excessive to repeatedly give young, healthy women exogenous hormones. Yet conception has become an event that millions of American women protect themselves from twenty-four hours a day, seven days a week, every week of the month, for many months, years, and sometimes even decades on end. Rather than use birth control solely when fertilization can actually transpire, many women are now continuously using pharmaceuticals for this intermittent chance. Through years of research, I have come to understand that hormonal contraception provides more than just assurance about pregnancy prevention and relief for menstrual symptoms. In this chapter, we will discover how it, and specifically the continuous regimens, serve to mitigate other risks, which are not physiological in origin but are instead attributable to the escalating complexity of our social milieu, or of late modernity (Mamo and Fosket 2009). Although it will be used throughout this chapter and the dissertation as a whole for purposes of convenience, I will ultimately provide an alternative to the term “late modernity.” This new term will describe the novel, ironic mentality that has led to the invention and popularization of the latest generation of hormonal contraception and the biomedicalization of the body (Clarke et al. 2010).

In brief, this chapter will examine several of the key, risk-laden discourses that are propelling the popularization of continuous contraception, and it will show how they not only link but instantiate three distinct but overlapping themes of late modernity: 1) “timelessness,” which covers simulation and nostalgia, 2) “selflessness,” which entails consumption and optimization, 3) and “bodilessness,” which includes flexibility and the posthuman. 1) In order to study the destabilization of time, I will explore how “pill periods” have been used to replicate menstruation and how continuous contraception may even work to imitate our ancestors’ abbreviated menstrual careers, taking nostalgia and simulation to a whole new extreme. 2) In order to investigate selflessness, by which I refer to the unfixed and ever-changing nature of the self, I will consider how both the physiological and economic consumption of continuous contraceptives are related to optimization and the pursuit of self-identity. 3) Finally, in order to study the dissolution of the body, I will analyze how the corporeality of the women using traditional and menses-inhibiting hormonal contraception is both flexible and cyborgic.

Altogether, the qualities of “timelessness,” “selflessness,” and “bodilessness” contribute to the incarnation of a medical anthropologist’s dream—what I call “the postmodern-paleolithic.” It is the embodiment of cutting edge biotechnology and Paleolithic fantasy. Ultimately, I will show how this timeless, selfless, and bodiless creation is not only the result of postmodern deconstruction, which is largely fueled by cynicism and anxiety about risks, but is also the upshot of late modern optimism. I will define “risk” as Anthony Giddens has, and I will sketch the postmodern and late modern periods or tendencies as done by Giddens, primarily, but also David Harvey and Fredric Jameson. I will model the “Paleolithic” off of a popular yet academically reproduced,

essentialized interpretation of epoch. Throughout this exposition, I bear in mind the argument of cultural anthropologists Thomas Malaby (2002) and Mark Nichter (2003), that no delineable, universalizable eras of human thought exist in practice (e.g. premodernity, modernity, late modernity, postmodernity, etc.)—not that the theorists mentioned above are rigid about them. Moreover, regarding the “Paleolithic,” biological anthropologists Beverly Strassmann and Robin Dunbar (1999) likewise argue that scholars of evolutionary medicine, who happen to be highly vocal about menstrual suppression, are guilty of universalizing an immensely diverse era and incredibly disparate set of people. In the end, I agree with both of these duo’s objections and argue that the contemporary phenomenon depicted throughout this chapter is neither best described as premodern, modern, late modern, or postmodern; it is “postmodern-paleolithic,” or something unique and not easily classified.

While undoubtedly more theoretical, this chapter is a continuation of the previous one, in which I showed how, through an exploration of several popular devices, the medicalization of hormonal contraception is increasing. Of course, birth control became a medical affair ages ago with the invention of irreversible methods requiring surgical intervention into the body. More recently, the physician and his/her assistants would assume responsibility over IUD, cervical cap, and diaphragm fitting, as well as the application of a host of other non-hormonal methods. Although they have all required medical assistance, none of these methods has demanded the near continuous or continuous renewal that hormonal contraception does; every time hormones are released, the body is re-subjected to medical intercession. With the move from non-hormonal devices to the hormonal methods, the body is seldom to never left unregulated.

Now that we have seen how the popularization of continuous contraception is occurring with the medicalization of menstruation, the body, and society, we must explore the why it is happening. Thus this chapter explores the mentality that has led to the popularization of 21/7 (21 days on hormones, 7 days off), 24/4 (24 days on hormones, 4 days off) and now continuous (no days off during most months) contraceptive regimens. What is the impetus behind the medicalization of our bodies? One answer is that we are living in a risk society—a simple response with extremely complex consequences (Rose 2006). Because we perceive today's world to be full of risks, we are constantly anxious, and thus motivated, to heed every given precaution. Although it is ubiquitous, the rhetoric of risk is particularly salient when vulnerability can be ascribed to the body¹, or to many bodies, as in the case of our national security. As we will see, safeguarding ourselves from a host of human-made risks is the major impetus behind the invention of a variety of recent biomedical innovations (Rose 2006), including continuous contraception. These regimens are part of the postmodern-paleolithic project, a project that is primarily characterized by its tendency towards (de)construction. It entails the deconstruction of structural limits, and the construction of perceived risks.

Timelessness

Although a major goal of hormonal contraception is to prevent birth days, the pill's own milestone birthday has been an occasion to celebrate. Perhaps serendipitously, the fiftieth anniversary of the invention of the pill, which garnered a modest degree of

¹In the introduction to this chapter, I do not separate the mind from the body. Later, when discussing “selflessness” and “bodilessness,” I will treat them as individual entities. In the end, I will show how they are intimately connected—even in contemporary, Western society.

attention in the popular press, and the initial drafting of this section, which explores how we mark the passage of time in late modernity, coincided. Here I will focus on how the pill and time have co-evolved—how both of their designs have been reconceptualized in recent years as part of the movement to characterize today’s society as inherently risky and in need of intervention. This intervention has evolved from sporadic, to frequent, to continuous. Through an examination of birth control and its progression toward extended hormonal regimens, we see how the rhetoric of risk has rocketed the role of contraception from part-time pregnancy preventer, to fulltime reproductive bodyguard, to antidote for late modernity.

As members of late modern society, we are constantly preparing our bodies for scores of risks that are sporadic if at all actually threatening. Giddens states, “[t]he flesh that is the corporeal self has to be chronically guarded and succoured—in the immediacy of every day-to-day situation as well as in life-planning extending over time and space. The body is in some sense perennially at risk” (1991:26). Because we are consumed with “life planning” and “perennial risks,” marketers are increasingly promoting continuous contraception and other hormonal contraception as more than just birth control. As we will see in Chapter Four, marketers are now promoting a gamut of uses. Elizabeth Kissling argues, “The original Barr Laboratories website for Seasonale...emphasized that taking Seasonale for menstrual suppression was a “lifestyle choice.” (2006:67). Accordingly, some women use continuous contraception not just for pregnancy risk reduction but in an attempt to control potentially life-altering and even life-threatening risks.

By regimenting our bodies with medicine as never before, women of late modernity can control incessant cycling and redefine monthly shedding. We can even simulate the hormonal milieu that regulated prehistoric women's bodies, and most astonishingly, refigure long-standing time. The next two subsections will explore how these two feats are accomplished, and correspondingly, how hormonal contraception can serve to mitigate some of the proximate and chronic risks to women's wellbeing. In the end, we will see how nostalgic we have become now that we not only consume technology, but are almost completely consumed by it.

Simulation

Commonly shaped like ticking dials, modern birth control devices are classic artifacts of a risk society; their primary function is to reduce a woman's chances for circumstances that could immediately impact her body, such as pregnancy, sexually transmitted infection², and unpleasant and perhaps even debilitating menstrual symptoms. Discourses related the first two possibilities have always been saturated with the rhetoric of risk. While this rhetoric has not changed significantly in recent years, it has intensified. One way in which I could discern the intensification was through my subjects' occasional mention of the practice of "doubling up," or the pairing of two modes birth control, such a hormonal and a barrier method. These discussions were unprompted—I did not ask any questions related to sex or its potential consequences. For some subjects, the physiological risk of sex was twofold, but for others, who were more likely to be in committed, presumably STI-free relationship, pregnancy was the

² Hormonal contraceptives do not protect against STIs. Here I refer to both hormonal contraception and methods designed to prevent STIs.

only fear reported. Still, many of these women were doubling up on birth control, too. Either they lacked confidence in their ability to use hormonal contraception as directed, or they were not certain that these pharmaceuticals, which are generally over 99% effective when used correctly, would offer adequate protection. Women from non-risk, less-capitalistic, societies are less likely to be engaged in what could be considered the compulsive consumption of protection. Their use of birth control is not only decreased from the outset, but they are less likely to be consuming hormonal contraceptives when they do use contraception (United Nations 2007). They are probably also less likely to be using multiple methods of birth control, or backup birth control. In the late modern risk society that the US has become, however, the existence of any risk is considered risky. Notably, it was not the goal of my interviews to learn anything about “safe sex,” a term that exists to emphasize how risky sexual activity can be. Nevertheless, the several inadvertent discussions that interviewees and I had about this topic illustrate how compulsory truly persuasive discourses are and why they should be studied.

Instead of asking my interviewees about safe sex, I prompted discussions about what could (and might someday) be called “safe cycling,” or monthly bleeding that is synchronized to a medically-imposed calendar. The original birth control pill was designed to mimic menstruation; actual menstruation does not occur for women while taking the pill or using its derivative devices. The bleeding episode that women have on the pill is withdrawal bleeding and results from the sudden discontinuation or reduction of contraceptive hormones. It is the discarding of a thin, rather than thick, uterine lining. This thin lining would not be able to sustain the beginning of a pregnancy, and thus its shedding is a “fake period” or a “pill period,” as described in the introductory chapter. In

1958, Gregory Pincus, the biologist who co-developed the pill with John Rock, wrote that they had the ability to make the women's bleeding cycles any length they desired. They chose to imitate a 28 day cycle with five days of bleeding, which is based on US averages, so that users would feel normal (Pincus 1958). We know that averages do not necessarily indicate the norm; the norm is likely a deviation on either side of this mean. We also know that women generally cycle less frequently than every 28 days when they are from societies whose diets are different than that of the so-called typical American. It seems the more we learn about the history of the pill and about the menstrual cycle cross-culturally, the more arbitrary and contrived pill periods seem.

Medicine is the ideal place for identifying simulacra, or copies of so-called authentic phenomena, according to Jean Baudrillard (1994:4). We are so accustomed to facsimiles in today's media-saturated world that in many cases these copies appear as authentic as their originals. Pill periods are a perfect example. These forced bleeding episodes seem so much like menstruation that most of my interviewees experiencing them did not even know that they were no longer menstruating. The few that did explain (note: the emphases are all mine):

My doctor here had said to me, you know, it's not a *real* period anyway. [S10]

My mom's told me, too, this period's *just for show*. It's not even doing anything. [S15]

I still think of it as a *real* one [menstrual cycle] because I still feel the same symptoms on the pill—just shorter symptoms, less of it. [S9]

These young women still bled, they still wore “menstrual” pads and tampons, and they still experienced moodiness, cramps, breast tenderness, bloating, acne, headaches, and more (but often to lesser degrees). Like a copy of a copy, the mark is a little faint, but the facsimile is near perfect. The only component that is lacking is fertility. Semiotically, the signifier (bleeding) no longer indicates the signified (a woman’s proximate ability to conceive), and consequently, menstruation has become an empty sign, or what Baudrillard calls a simulacrum. Baudrillard argues that a simulacrum “can be reproduced an indefinite number of times” (1994:2), but he just as easily could have said every 28 days for decades on end.

My interviewees who had not adjusted their bodily rhythms to a medically imposed 28 day scheme, and who were not using any form of hormonal contraception, were far more likely to be unsure of, and thus anxious about, when their bleeding episodes would arrive and when they would stop; they had no sense of control. One subject explains what it was like waiting menstruation to start, before she began using hormonal contraception:

I’m sitting there counting, counting, counting, and then it’s a week late. I’m like okay, okay. And then you’re completely off; you don’t know. And there’s another ruined pair of underwear. [S31]

Another interviewee, who has no intention of ever using hormonal contraceptives despite how inconvenient menstruation usually is for her, describes a similar situation—her eyes are fixated to the clock, just as was once the case for subject 31.

You have to worry about it; you look at the clock. For the first few days, I’m pretty heavy. I have to be on the clock. It’s been how

many hours? Okay, I have to go to the bathroom. That gets old.
[S20]

Both of these interviewees' statements are deliberately repetitive (ex: "counting, counting, counting... okay, okay" [S31] and "the clock...the clock" [S20]). The repetition serves to underscore how tedious it has been for them, trying to predict their cycles. Like these two informants, many women's menstrual cycles are irregular, and consequently, they must take certain chances that are reduced for women who are regulating or suppressing their "natural" hormonal fluctuations. As described in the introductory chapter, they may ruin their clothes, as subject 31 notes. Or they might miss school, work, or an event, due to debilitating symptoms (or frequent bathroom trips, as was the case for subject 20). In sum, unregulated cycles pose many risks. The risks might seem insignificant, but added together, especially over time, and they can begin to be cumbersome. For my two interviewees with endometriosis and the two with polycystic ovarian syndrome, including subject 31, menstruation is riskier from the start and causes even more disruption to their daily routines.

My subjects who do use hormonal contraception experience fewer disruptions and generally describe the occurrence of their bleeding episodes as clockwork. Subject 35 summarizes what hormonal contraceptives are capable of, "I know exactly when I'm going to start and exactly when it stops." Another interviewee elaborates:

I know more or less the date of when I get my period because I have my birth control with me, and I can count. Right? Like I stop birth control on Wednesday, and I always get my period on Saturday, the next Saturday. It's a rule! It's a rule—I know it. I schedule everything around it. Like last time I got a bikini wax on Friday, and [my boyfriend] was asking me, "But aren't you getting your

period?” And I was like “No! I’m getting my period tomorrow. I can schedule it on Friday!” [S16]

Unlike subject 31 (before she started using hormonal contraception) and subject 20, time is more predictable for subjects 35 and 16. For subject 16, it has become so standardized that it is “a rule.” Nevertheless, because she and subject 35 are using 21/7 regimens and are thus still experiencing calibrated bleeding intervals, time has not been dissolved; they are still very cognizant of the time of the month. As subject 16 has explained, she “schedule[s] everything around” her pill periods. Even though time is constant and knowable for her, bleeding is still as cyclical and as persistent as ever. Another interviewee tells me about how much she, her sister, and her sister’s friend are aware of time—not just the time of the month, but the exact time of the day.

When [my sister] went to college, she was like, “Me and my roommate both have our alarms on our phones that go off every day to remind us to take the pill.”...When I sit down at work, I take it... I keep it in my purse, just in case I’m doing something else. [S21]

I have been surprised at how many times I have heard in both interviews and casual conversations that women are using their phones to help them remember that it is time to take the pill. Many of us have transitioned from jotting monthly penciled reminders of when to expect our periods, to setting daily electronic alarms indicating when it is time to take the pill, illustrating how important it has been to keep pace with a monthly rhythm and how imperative it is now becoming to maintain a daily cadence. The acceleration of the self-monitoring of the body shows how time is being compressed, or at least renegotiated.

While time is becoming increasingly regimented, it still remains a modernist notion for users of hormonal contraception who are experiencing standardized bleeding intervals. Instantiated in the form of menstruation, time is still logical and progressive. It leads to an eventual, “natural” cessation, which is instigated by pregnancy, nursing, or menopause and not through the use of continuous contraception. This plan is not called into question; my interviewees using 21/7 pills trust the traditional recommendations of the medical establishment. In the next section we will see how continuous contraceptives are revolutionary in design; they not only interrupt time and perhaps even compress it, but they may even reverse it.

Nostalgia

Like the original pill, menses-suppressing pharmaceuticals are also designed to yield a simulacrum. Some of these regimens, such as Seasonique, are designed to induce five days of bleeding at the end of every three months. Although a curtailed facsimile of monthly menstruation, the pharmaceutical is designed to provide just enough simulation for comfort; it still serves as a physical reminder that a woman is neither pregnant nor permanently amenorrheic³. Besides being a spinoff of the traditional birth control pill, which produces an imitation of menstruation, continuous contraception can also be used to mimic a Paleolithic menstrual career. Research from evolutionary anthropology argues that contemporary American women are menstruating more frequently than any other women throughout time, having almost three times as many cycles in their lifetimes as did women in the Paleolithic, the longest period of human history (Eaton et al. 1994,

³ Amenorrhea is generally defined as the absence of menstruation, but it also refers to the absence of pill periods, as well.

Strassmann 1997). Frequent menstruation is a relatively new occurrence, which may not only be unnecessary but unhealthy, too. It has been linked with a variety of pathologies, including dysmenorrhea, endometriosis, epilepsy, anemia, and premenstrual syndrome, as well as arthritis, asthma, myomas and cancers of the breast, endometrium, and ovary (Andrist et al. 2004; Eaton et al. 1994; Spicer and Pike 1993). Essentially, hormonal contraception is not only able to mimic menstruation, but continuous regimens may also simulate the abbreviated menstrual careers of our ancestors.

While undoubtedly replete with its own obstacles, the Paleolithic world is selectively enviable and imitable because it lacked many of our current problems. In addition to the epidemicity of the so-called diseases of civilization, some of which are listed in the preceding paragraph, our late modern world is plagued by many other chronic risks including, but far from limited to, nuclear/biological warfare, terrorism, overpopulation, global warming, oil disasters, and national/personal financial collapse. These types of risks, and the prevalence of chronic diseases in particular, are largely unknowable, unforeseeable, and thus unparalleled in terms of their ability to provoke anxiety. Chapter Four will detail at length *how* both experts and lay subjects are deploying references to anthropology, specifically hypotheses about Paleolithic physiologies, in an effort to support menstrual suppressants and bolster their potential as preventative medicine against women's reproductive cancers. This section will discuss *why* they are doing so. What is it about today's world that makes it so emotionally draining?

I began my pursuit for answers by encouraging my subjects to characterize late modernity during the course of our interviews. To do so, I prompted questions about the

rise in the incidence of the diseases of civilization and about my interviewees' personal faith in science and medicine. Many of the informants would characterize late modern society as perilous and themselves as anxiety-ridden. Here are several examples:

We're thinking ourselves sicker. [S4]

People are becoming more paranoid...You read something in a magazine and you think you have it. [S9]

I also am very paranoid about the digital age... Technology scares the crap out of me. [S20]

We like to think that we know what's safe and what's not, but... we don't even know that we're doing. [S24]

First it was, "Don't take aspirin." Now it's, "Don't take Tylenol." "Don't take this and do that." Everything's changing. I think the less that I have to actually put in my system, the more chances I'll have of being somewhat healthy. [S28]

Something's on the market, tested for five years... and then ten years later they say, "Oh wait! I thought it fought cancer but actually there's this other cancer." [S21]

Doctors will prescribe things because their patients want something wrong with them. [S48]

You have the pharmaceutical companies, and they're about profit; they're not about wellbeing. [S41]

We make diseases for ourselves, and then we make the drugs to treat them. [S34]

Americans love drugs. We really love drugs.... I've lost trust in them, especially having friends that work in the medical field that have done studies on drugs and know the process of how they go through the FDA. [S29]

The pills we use now are ten times lower in dose than what they went to market with. There have been a number of books written about birth control pills, the whole development of how it happened, and how unscientific it really was. [S19]

[I was] a guinea pig for about a year while they were figuring out that it's the interaction of the hormone and the mood stabilizer. [S32]

I'm always skeptical... There's a lot of scientific propaganda out there. You've just got to be careful. [S23]

Skepticism, fear, paranoia, and pessimism have inspired most of my interviewee's responses, but a few informants did express more positive than neutral or negative sentiments about today's world and its ability to generate genuine progress. Subject 28 briefly states, "I thank the powers that be that I live in an age where Aspirin exists." Two more subjects elaborate:

You know we're not pooping in the forest anymore, wiping our butts with rocks. That's a way we could do it. We're using toilets now, so why not move up in the medical field?... God designed our bodies for certain ways. God also designed very smart people and very smart doctors for innovation. [S44]

Thank God for modern science. If I don't feel well and there's a pill or a syrup or something I can take to make me feel better, I'm going to do it... Thank God for medicine... I mean I think it's just pluses all over the place... [S40]

These three remarks were the strongest endorsements of modern scientific/medical/corporate culture that were expressed in my fifty interviews. The first conjures "the powers that be," and the other two make appeals directly to God. I did not detect this commonality until after I had juxtaposed the passages, nor did I initially notice that the three quotations collectively evoke this section's theme of time. The first two women make allusions to earlier ages and represent these periods as lacking, and the third praises "*modern* science," (emphasis mine) as opposed to science that is perhaps premodern or anti-modern. Altogether, these invocations of God and of progress are

intended to portray a modern rather than a late modern outlook; these women have not lost faith, they believe we are advancing, and they remain optimistic about the direction of society. Regardless, these interviewees illustrate the point that I made in the introduction to this chapter, that contemporary women (and presumably men, too) are neither unanimously modern, nor late modern, nor postmodern in rationale; something else is occurring.

On the whole, only a minority of my interviewees were defenders of the late modern trajectory. One interviewee who was wary of our contemporary “advancement” extended her critique and offered what has become a trendy solution. She, subject 22, says, “I think that there have many mistakes in trying to fix things that are not broken to begin with in science... Maybe we should not be that adventurous and stick to the old way.” This interviewee is nostalgic and suggests a reversion to the ways of the past. During the interviewing phase of my fieldwork, I collected literally hundreds of nostalgic quotations from my interviewees lauding “natural” methods over those that have been acquired via technological innovation. “The natural” and what could be called the “super-natural,” or “the organic,” are idealized now more than ever, not only among my interviewees, but in marketing, in the news media, in political campaigns, and across the board. Now that the term “organic” is generally regarded so positively and has proven so profitable, what could be considered the “super-organic,” or the Paleolithic, is now becoming a persuasive selling point as well.

As will be discussed further in the following chapter, we are looking to the Paleolithic to discover the most instinctive ways to infant nurse/feed, birth, diet, exercise, date, sleep, and walk/run. The resurrection of the Paleolithic is perhaps most evident in

diet industry, as the titles of the following regimens by Loren Cordain (2002), Joseph Morse (2008), Elizabeth Somer (2002), and Ray Audette (2000), respectively, indicate: “The Paleo-Diet,” “The Evolution Diet,” “The Origin Diet,” and “The NeanderThin Diet.” Many of us are confident that millennia of cultural development have obscured the path to a balanced lifestyle.

It is important to bear in mind that we are lauding a myth and not a reality (Jameson 1991; Krech 1999). Instead of depicting Paleolithic realism, in which the acquisition of nutrition and shelter could oftentimes be a challenge, we commonly portray life in the Stone Age, as well as many bygone eras, romantically. According to this interpretation of prehistory, social solidarity and ample time were luxuries of everyday living. Earlier peoples had a special, spiritual relationship with nature (Krech 1999). Sewing, fishing, and gardening were not occasional diversions as they may be now, but they were everyday pleasures. Baudrillard (1994) has commented on our nearsightedness. He argues that the contemporary American “reinvents penury, asceticism, vanished savage naturalness: natural food, health food, yoga...,” (13) and various other trends, more or less as a means to temporarily escape from today’s world into a premodern fantasy, or what Leslie Aiello calls a “paleofantasy” (Zuk). The union of “reinvention” and “savage naturalness,” or of simulation and nostalgia, results in the postmodern-paleolithic—or a seemingly paradoxical mode of thinking that includes both biotechnological and premodern elements.

At first glance, the resurrection of the Paleolithic appears to be both an indirect means of criticizing late modernity and of surrendering any authentic sense of historicity to the gods of capitalism, who profit from the regurgitation of somewhat poignant and

thus commercially-effective stereotypes (Jameson 1991). If true, then the postmodern-paleolithic can drop the “Paleolithic;” all we have is postmodernism. However, the phenomenon could also serve as an alternative to the widespread cynicism of postmodernity and to its lack of historicity. If so, then perhaps some late modern optimism has materialized despite the contemporary profusion of risk. Perhaps Anthony Giddens was right and individuals can create social change and alter the trajectory of late modernity. As Deleuze and Guattari (1983) have argued, cynicism and piety, or what I refer to as romanticism, frequently serve as equalizers in a capitalist society. Instead of always racing forward haphazardly, we can stand still—or even go backward. Although a return to the past often entails the capitalist consumption of an indistinct past on the behalf of a narcissistic present, the notion of progress, which existed long before late capitalism, is still a principal reason for the journey.

Whether time has technically been compressed, frozen, reversed, or even abolished in the late modern period is not of importance for the purposes of this chapter. What matters is that the reconfiguration of time is possible within a certain theoretical framework. The very existence of modern paleo-inspired rituals, not to mention their widespread popularity, is indicative of a unique mentality that is critical yet romantic—and thus perhaps optimistic. In the following sections, I will discuss how, in addition to time, the postmodern-paleolithic is a reconfiguration of the self and of the body. What we will continue to find is not comprehensively postmodern, late modern, premodern, or anything in between; it is postmodern-paleolithic, or what is on the one hand a continuation of the traditional way of thinking, but is, on the other hand, novel in its extension of the limits.

Selflessness

Consumption

In addition to illustrating and extending the flexibility of time according to a theoretical framework inspired by Giddens and his contemporaries, the postmodern-paleolithic serves to demonstrate the plasticity of the self in present-day society. Besides using psychopharmaceuticals to manipulate self-identity, we can use other kinds of pharmaceuticals, e.g. hormonal contraception, as a means to negotiate the self. The self is no longer understood to be completely stable or fixed, at least according to a late modern theorization of it. These pharmaceuticals exist not only as physiological tools but as cultural tools as well, whose consumption has both biological and sociological consequences.

In late modernity, we fetishize small tablets, caplets, injections, patches, rings, etc. to the point that these cultural commodities have become infused with life-enhancing powers. We not only receive the physiological benefits promised in these products' packaging,⁴ but through their consumption we may also develop a sense of who we are and how we fit into the world. In this section, I will first explore how both the economic and corporeal consumption of these objects is linked to the development of self-identity. This discussion will segue into an exploration of continuous contraception and self-optimization, the latter of which Carl Elliott (2003) argues to be the ultimate goal of modern-day medical consumption. Through the practices of consumption and enhancement, we will see how the body at risk has become the impetus behind the

⁴ Some of the implicit, ego-enhancing promises that marketers have offered in Seasonale and Seasonique commercials will be explored in Chapter Four.

crafting and re-crafting the self, which is as manipulatable as is the theme of time in the postmodern-paleolithic.

This subsection, like the chapter as a whole, starts with the assumption that the world is out of our individual hands—almost, but not quite. We cannot safeguard it and its inhabitants from all of the risks that plague us, which we are reminded of minute by minute through the media, at the boardroom, in classroom, at the dinner table (or rather the TV tray), and everywhere in between. Consequently, we turn our efforts inward and try to control the one universe over which we hold jurisdiction—our personal world and its globe, the body.⁵ Although we do not have total sovereignty over ourselves—there are many rules prohibiting free reign—we still maintain more control over our bodies than we do probably anything else. In an effort to control what we perceive to be the most personally manageable of risks, we engage in body projects, or enhancing or regulating regimens that are intended to mitigate a source of anxiety and provide a sense of self-mastery. Examples of conventional projects include dieting and exercising. Increasingly, however, these largely elective endeavors entail the consumption of biomedical, and specifically pharmaceutical, treatments (Rose 2006).

Economic consumption has become a daily, hourly, and perhaps even minute by minute practice—thanks to e-commerce—in which we engage in the pursuit of self-actualization. As a possible extension of the Protestant work ethic, many members of late modern society have developed the drive to work continuously and rigorously on ourselves, engaging in what Giddens (1991) calls “reflexive projects of the self,” or essentially utilizing what Foucault (1987) calls “technologies of the self,” in order to

⁵ Although I attempt to discuss late modern notions of selflessness and bodilessness separately, the self and body are so intimately connected—even in contemporary, Western society—that inescapably, both this section and the next will overlap.

reach some kind of salvation. This salvation may be sought in the name of a higher power, but more and more frequently it appears to be straightforwardly self-concerned. In theory, this consumptive work may result in a renewed sense of self or even a completely new sense of self. In practice, however, we may find that there is no true self and that there can be no new self; we are ephemeral and selfless, and only the act of consumption itself will endure throughout late modernity. While consumption has become a primary, if not *the* primary, means through which we assert agency in late modernity, medicine has become a multi-trillion dollar industry in the US. Accordingly, medical consumption has become a principal mode of self-expression (Elliott 2003). Consequently, hormonal contraceptives, and continuous regimens in particular, serve as perfect examples of commodities that can be consumed in reflexive, self-affirming projects.

The birth control market illustrates the multitude of consumptive options that exist in late capitalism. When I started my research, Ortho Personal Pak's came in the following six varieties: "Expressions," "Fuchsia Daisy," "Onyx," "Lapis," and two editions by famed fashion designer Nicole Miller: "Jewel" and "Red High Heels" (Ortho-McNeal, Incorporated 2008). A Personal Pak is a birth control dispenser that looks just like a makeup compact. Each Pak has been designed to reflect a woman's supposedly unique personality, whether she is a shoe lover, an animal lover, a jewelry lover, etc. On the one hand, these six superficial yet popular motifs serve to personify woman's thoughts towards sex, women's liberation, nature vs. culture, etc. On the other hand, by concealing their contents, they really serve to keep these attitudes a secret, along with all of the decision making that went into purchasing the pill.

Choosing among the Paks is perhaps the simplest decision related to birth control. Their manufacturer, Ortho-McNeal, makes thirty different types of hormonal contraceptive pills (International Planned Parenthood Federation 2010). This US pharmaceutical corporation is just one of many that markets hormonal birth control pills. Hundreds of FDA-approved varieties are on the market, and generic versions of many of these name brand medications exist, as well. Of course birth control pills are just one form of hormonal contraception—there are now shots, rings, patches, implants, and IUDs. A plethora of non-hormonal choices are also available, such as barrier, surgical, and rhythmic methods, all of which entail or can be assisted by the use of one of thousands of marketable products or procedures. Then, there is the option to pair any of these products and/or methods, which women and men often do for added security, as mentioned in the previous section.

Altogether, women, especially American women, have a near infinite number of factors to consider when it comes to this one choice—which birth control to use. Each decision—whether it is driven by a woman’s preferences regarding aesthetic design, name brand recognition, economic value, efficacy rates, ease of use, popularity among doctors, peers, and/or confidants, certain side effects over others, the inclusion/exclusion of placebo pills, specific hormone combinations, specific methods of hormone delivery, the hormones’ longevity in the body, their localization in the body, and on and on—may augment the idea that one’s preferences are novel and reflective of an inimitable self-identity. In today’s consumer-driven world, we make choices *ad nauseum* because each decision promises to more clearly define us. We do not just tolerate but rather demand infinite choices, so that we may try to cultivate our personalities as much as possible.

Optimization

Consumption not only provides a means of articulating who we are, but it also gives us the opportunity to potentially become who we want to be, or to enhance the self. In her well-known essay on the medicalization of the body, Margaret Lock (2004) describes the path that led individuality to become tied to the construction of disease in Western society. She argues that while the intensified governance of the body has some crucial benefits, such as an increased average lifespan, the modern medicalization and late modern biomedicalization of the body have shifted medicine's objectives. In addition to healing the body, the medical establishment became focused on pathologizing and optimizing in the 17th century, on the one hand, and mitigating risks on the other hand, although much more recently. I argue, and I think that Lock would agree, that the two hands are crossed—we create new problems and enhance our bodies in order to mitigate personal risks, be they social, cultural, pathological, etc. in origin. When the self is optimized or enhanced, or is existing in its most impenetrable and immaculate state, the risks to it may be minimized. This is especially true when the self is acting as a medical subject. Ultimately, this subsection will show how consumption, specifically the consumption of elective medical treatments, is about gaining a sense of control over risks that threaten the modernist notion a stable, fixed, and progressively developing self. While many of us consider the idea of the unchanging self to be a myth, as we will see, we remain modernists at heart when it comes to understanding and envisioning ourselves personally. Thus our conceptualization of the self is not purely modern or postmodern—it is far more complicated.

Before discussing how my contemporary subjects are enhancing their bodies through the use of hormonal contraception, a practice that is done in order to gain a better sense of control over the risks associated with ovulating and menstruating—and with being unmedicated and unregimented in general—I will first show that bodily practices aimed at self-enhancement did not originate in late modernity and thus cannot be considered to be completely “modern” or “late modern.” In a sense, they are throwbacks to the ancient past à la the paleofantasies briefly described in the previous section and more thoroughly detailed in the next chapter. While they have certainly escalated and intensified so much so that they have new significance, routinized, elective bodily regimens intended to improve the female body, and in turn her psyche, are not novel.

Medieval holy women starved themselves, in large part, to overcome their bodies’ carnality and to ultimately improve on the “natural” female design (Bynum 1987). Interestingly, like many of my interviewees who were using continuous contraception, a primary goal of the practice was to induce amenorrhea. Despite its similarity to medieval starvation practices, Giddens has explained contemporary anorexia nervosa as a purely late modern phenomenon that has developed, in part, as a rebellion against the overwhelming demands of contemporary society. He states, “Anorexia should... be understood in terms of the plurality of options which late modernity makes available...” (1991:106). The disorder may be understood as an act of defiance; not only is the physical act of consumption discontinued, but economic consumption that precedes physical consumption, which our society thrives on and venerates, is also negated (Brown 1992). This negation is largely responsible for the difference between the contemporary and ancient starvation practices described.

Starvation practices may be the result of regression, literally. If the world ever appears to be safe and controllable, it most likely seems this way during childhood, before the realities of life are generally well-known. For many women, menarche signifies the beginning of sexual maturity and adolescence (Martin 1987). Anorexia could result from a desire to suppress menstruation and fertility, or adulthood. In a sense, the disorder is a means of reversing time and of becoming juvenile again. Of course, the reasons why women engage in radical body projects are complex and sometimes unknowable—and should not be oversimplified. Still, it is fair to theorize that menstrual regulation is about controlling the self—and time as well. Here the themes of “selflessness” and “timelessness” overlap, and of course, anorexia entails both literal and figurative “bodilessness,” too.

Like both modern anorexics and the medieval holy women, many late modern subjects, or several of my interviewees, have reported to having felt “out of control” or “not like themselves” during the course of their cycles. While the current quest for control of the body’s shifting states and for a sense of self-identity may lead to starvation or fasting, it more frequently entails its opposite—the culturally preferred practice of consumption (Giddens 1991). Rather than abstain from consumption in order to achieve amenorrhea, many of my subjects consume hormonal contraceptives to either regulate or suppress monthly bleeding. Below, without any prompting, several of the interviewees discuss how pharmaceutically induced menstrual suppression may beget the enhanced sense of “control” that they have desired. Notably, each of the following informants that I have quoted expressed a degree of mixed emotions about using hormonal contraception, based primarily on its emotional, rather than gynecological, effects. This uncertainty

was extremely common, even among the most devout users of the hormonal contraception. For example, Leslie Miller, who is one of the most eminent researchers/supporters of menstrual suppression in the US and the founder of NoPeriod.com, shared recurring feelings of conflict over her personal use of the pill. So while some sense of control is gained, doubts about the authenticity and permanence of that control commonly linger. As previously stated, we rarely cure our anxiety in a risk society; we just try to quell our fears as much as possible, trading certain safeguards for others. Here are a few of the statements about “control;” the emphasis on “control” is mine:

There is an idea that you are more in *control* if you *control* the things that happen without your willing it to be so. And so all of a sudden you have no *control* [when] your period comes. [S17]

...[T]o be in *control* of it is kind of nice. But yeah, on a deeper level, I do feel like you shouldn't be in control [of the ovarian/menstrual cycle]. [S24]

When I'm on the pill, it's like I take *control* over my body. And I decide when to have children or not. Right? So it's kind of like this very feminine kind of like libratory practice in a sense... [S16]

The fact that contraception is called “birth *control*” in the first place underscores the idea that it is about the personal domination of risk. Although these interviewees are evoking “control” during a conversation on contraception, they do so in order to connote *self*-control, rather than birth control or physiological control, which may be gained through the hormonal regulation that the pharmaceuticals facilitate. In general, most of the interviewees believed that the use of hormonal contraception (at least that of the non-

continuous variety) would bestow a sense of mastery over the body and over its susceptibility to risks.⁶

In a colorful yet very insightful description, one interviewee describes in detail the loss of a sense of self that she has experienced alongside menstruation:

You want to get those jeans but you know you shouldn't go to the fitting room today because you are about one and a half inches larger than you are in real life. So a period becomes this space of not really you, like this time when you're not even yourself. You're fatter than you are, you're more emotional than you are, you're hungrier than you are, you're more not you—or *[maybe even] more you*—than you are in the other three weeks. And so it's like ... a space of not being yourself... Things aren't as predictable as they were... When I am on my period and I see those save the children commercials with flies in children's eyes, [like I did] just recently, [and] I was [sic] balling. Balling! And two weeks ago I would have flipped the channel. There's something to that.... There's just this space of time where I don't feel like who I really am. [S17]

Some of my interviewees have suggested that the opposite might be true—which subject 17 briefly considers in the phrase that I have italicized above—that women are actually more themselves when they are menstruating than when they are not. They believe that the hormonal changes that occur around menstruation serve to elicit their truest, most uninhibited selves. Here are their sentiments:

When I miss a period, everything just kind of feels off. Something with my body, like I'm waiting for something to happen. [S4]

Why do you feel so uncomfortable by getting something that you are meant to have? So in a sense ... [menstrual suppression is] like denying a part of who you are, or not dealing with it. [S16]

⁶ These interviewees alluded to the “short-term” risks already discussed, such as pregnancy or normal, but possibly debilitating, monthly menstrual symptoms. They were not referencing chronic risks, such as reproductive cancers.

Every couple of years I go off [of hormonal contraception], just because—I don't know—just because you think it might change your life. But then you have a bunch of pain and bleeding and everything. And I don't feel that much different—I mean [my] moods [do not differ]. [S19]

Leslie Miller delivered this last passage. Although she discontinues her hormonal contraceptive regimen every now and then, she ultimately feels that she is more in control of her body, and by extension, her mental self, when she is suppressing menstruation. So while there are exceptions to the logic that medicalization yields control, most of my informants, the majority of the time, felt an increased sense of control when regulating their cycles and when using medical treatments in general.

Significantly, overmedication was a common fear among the interviewees, which they unanimously considered to be an unrestrained societal problem—and not at all a personal one. Many of the skeptical quotes listed in the previous section on “timelessness” speak directly to this issue. I suspect that my interviewees were downplaying the extent to which they personally take pills and other pharmaceuticals. If they did accurately describe their practices, and if they really do represent a cross-section of the women in their age-group, which I believe to be true, then almost all of them are completely unlike the average American consumer/medical patient. Perhaps they were trying to present the best versions of themselves to the anthropologist. It is odd, however, that so many of them would downplay the role that medication plays in their lives in an interview that was from the outset about their use or disuse of a specific type of pharmaceutical, with the former being the usual topic by far. I suspect that many of them do not even consider hormonal contraception to be medicine, since those who use it do so whether they feel well or not. One informant has said outright that she did not categorize

it as such. She states:

Contraception is the only medicine that I've really been on for years... It is because I feel like it's absolutely necessary for me, to live the life that I want... I really don't think birth control is like other drugs. I think it's really different... I mean I get really frustrated that I even need a prescription for birth control because I feel like it should be free, and I just don't think of it as a drug... [S50]

Again, this interviewee was not alone in her sentiments—she was just the only informant to so clearly articulate a common belief among the young contraceptive users, that elective treatments are not really medicine and are thus probably safe enough to use on a daily basis for years and even decades on end.

Even though the medicalization of the body is so ubiquitous, as described at length in the previous chapter, the body on medicine, especially the young body, is stigmatized to a certain extent. I became quite aware of this truth when completing the interview phase of my fieldwork. My informants left me with the impression that medicating and overmedicating, in particular, are commonly interpreted as signs of personal weakness. For example, as mentioned in the introductory chapter, subject 13 used the word “weak” six times during the course of our interview to describe women who use hormonal contraceptives to reduce menstrual symptoms and/or miss work or school because of menstrual-related debilitation. Although her feelings were exceptionally unsympathetic, she was not alone among my interviewees in thinking that the medicalization of the healthy body can be a sign of self-indulgence.

The late modern consumer is in a constant state of predicament. Besides having to wade through a superfluity of consumptive options, s/he has to be careful not to

consume too much or too little, otherwise his/her behavior might earn the label “extravagant.” Even worse, it might be considered “disordered.” The latter seems truer for physiological consumption than economic consumption, although stigma is frequently attached to both. Just as anorexia is a disorder related to the under-consumption of food, over-consumption is also considered both dangerous and offensive. It can lead to gluttony and/or substance abuse, in the physiological sense, and pride or conceit, in the economic sense. Suffice it to say, while consumption can lead to personal optimization and a new or renewed sense of personhood, it can just as easily lead to self-destruction, or at least some degree of social shame. In sum, the process of achieving and maintaining a sense of self-identity requires continuous negotiation, and in the end, we are defined as much by our consumptive habits as we are by our abilities to show restraint. The average late modern consumer cannot act too haphazardly; s/he must follow the prescribed route, both literally and figuratively, to attain a healthy lifestyle and a balanced self.

The prescribed route increasingly necessitates the use of elective pharmaceutical treatments, such as continuous contraceptive regimens, which fall into a gray area. Neither generally considered a medical necessity nor just an enhancement technology, these commodities allow us to work on the self in disguise, or rather, with the pardon of the medical establishment—an esteemed industry that may afford its patrons the right to more treatment, and perhaps more indulgence, than many others. As previously mentioned, my informants have demonstrated how the medicalized body may be stigmatized, especially the young medicalized body. I do suspect, however, that this particular stigma is beginning to change. Subject 13 will be in the minority in the future, as the younger generations mature, generations that have had more exposure to the

medical industry early on than any others. With the increased presence of biomedicine in our lives, enhancement treatments, which are now designed to treat any risk or blemish to an individual's carefully calculated persona, will be utilized more and more routinely (Rose 2006).

While enhancement technologies are late modern inventions that are essential to projects aimed at constructing or reconstructing self-identity, continuous contraceptives offer a novel, postmodern-paleolithic spin to the optimization trend. These commodities make enhancement therapies not only seem desirable but urgent, as well. Their user can potentially mitigate chronic risks, which have become pandemic in late modernity. To further define the postmodern-paleolithic modality—it is the application of risk, both proximate and chronic and real and imagined, to the ever-growing mandate on consumption and the development of a thoroughly optimized, or honed, self-identity. Never before has the execution of reflexive projects or technologies of the self seemed so imperative. While the self seems to be more ephemeral than ever before, it is still not completely intangible. It is not entirely postmodern, but postmodern-paleolithic, because it is anchored to something substantial—risk.

Bodilessness

Flexibility

Not only is the postmodern-paleolithic “timeless” and “selfless,” but it is “bodiless” too, which is most paradoxical for a mindset that is perhaps best exemplified through a commodity that is designed to alter the chemistry of the body—yet stop far

short of dissolving it. As we will see in the end, “paradoxical” is perhaps the best word to describe the condition at hand. This concise third section on “bodilessness” is a continuation of the second section more so than the second is an extension of the first, because although we beneficiaries of Cartesian dualism may try, we cannot separate the mind and body completely; “mindlessness” and “bodilessness” intrinsically overlap. The mind, or the brain, will always be part of the body—after all, it is body.

As discussed in the previous section, the majority of us members of late modernity are continuously engaged in a variety of projects that are directed at disciplining our body’s performance and in turn, the functioning of the mind, too. Increasingly, these risk-mitigating endeavors not only entail pharmaceutical intervention that can simulate the physiologies of early, Paleolithic humans, but they also invoke the enhanced, or “flexible,” contemporary human—and perhaps even the futuristic “posthuman,” too. As we will see using continuous contraceptives as our perennial example, these technologies serve to disassociate our bodies from their mortality. This section will begin with an exploration of the concept of “flexibility,” or the ability to extract the most out of the naturally limited, imperfect human bodies. In the second part of this section, I will discuss the step beyond the flexible body—the posthuman, or cyborgic, body. Again, this discussion of “bodilessness” overlaps considerably with the previous section, and what is more, its themes will be revisited again in Chapter Five. Consequently, this section will be shorter, yet no less significant, than the previous two.

While the theme of “bodilessness” is directly related to “selflessness,” it is also linked to our first theme, that of time and “timelessness.” Time has always been characterized as a burden for women, more so than men—it is something that seems to be

not only stalking but bearing down on the female body specifically, despite its increased life expectancy. As a consequence, women are often inherently alert to the presence of time—menses serve as a built-in monthly calendar, a biological clock, and a moondial; there is frequently a correlation between reproductive cycling and the lunar phases. As long as women are experiencing regular bleeding episodes, they will be attuned to time and its mounting risks. Bleeding is not only the most obvious sign of women's temporal burden, but it is also symbolic of mortality—reminding us of our ephemerality and of that of our world.

As Eaton et al. famously argued, we are “Stone agers in the fast lane” (1988), or mere mortals whose bodies were made for a different place and time. Because our biology has hardly evolved since *Homo sapiens* originated an estimated 200,000 years ago, we are in many ways biologically maladapted to today's fast-paced, yet often sedentary, late modern lifestyle. We have always tried to compensate for our biological limitations through the invention and implementation of tools. Increasingly, however, we are treating our bodies as the technologies to be crafted and re-crafted. Little by little, we are trading our Stone Age physiques for better equipment. This “upgrading” process often means overriding so-called natural bodily processes, such as “incessant” ovulation/menstruation.

Because of its many associated risks, which I have described at length throughout the dissertation thus far and specifically in the subsection of this chapter titled “Nostalgia,” monthly menstruation and its associated symptoms may interfere with a woman's ability to perform her regular routine⁷. It is not uncommon for a young woman to have to take leave from work or school because she is experiencing debilitating

⁷ Similarly, menopausal symptoms might make it difficult for an older woman to complete her day.

menstrual symptoms, as discussed in the introductory chapter. Although taking a traditional hormonal contraceptive may help reduce menstrual symptoms, only with the use of the continuous regimens can a woman potentially thwart all of the signs of menstruation, including the bleeding episode itself.

Not surprisingly, continuous contraception is appearing on the market in an age when women are increasingly likely to work outside of the home. In the late modern era, “flexibility” sustains global capitalism, and at least theoretically, the use of biotechnological assistance (i.e. continuous contraception) could yield a more industrious female worker (Martin 1987). David Harvey describes the late modern professional who is “expected to be adaptable, *flexible*, and if necessary geographically mobile” (1989:150, emphasis mine). In addition, the late modern professional may also need to be multilingual, have an adaptable schedule, procure daily childcare, and possibly even maintain multiple residences. This person’s time and energy need to be as limitless as possible. In order to help meet these demands, a female employee might opt for a continuous contraceptive regimen. It is the body, after all, that drains a person’s time and energy; it needs rest, nutrition, exercise, etc. By controlling the body’s requirements, one by one, the flexible worker can minimize sick days and maximize productivity.

In her own words, subject 17, who aspires to be both a career-woman and a mother, has explained how being flexible would help her reach her goals. Describing her ambitions, she explains, “I have things to do. I have a life. I’m a busy working [woman], not wanting to be a mother [yet]. I have vacations [planned], and I don’t want this [menstruation or bleeding episode] every month.” She continues, describing how she

plans to use birth control⁸ to help her manage her time. “I want to be pregnant in this tiny space in between when I get back [from living abroad] and when I’m writing up... You know, you can type and gestate.” By planning to complete her doctoral dissertation while preparing to begin a family, she intends to multitask and make what she believes to be is the best use of her time. She goes on, perhaps inspired by her own familiarity with the concept of “flexibility,” “... If your periods are so uncomfortable that they debilitate you from being a good citizen—working and doing everything that you need to do—then it’s almost incumbent on you to do what you can to control that...” What my fellow graduate student means is that it is becoming increasingly imperative to treat one’s body as capital, or as an investment. Those who are not equipped for what is becoming an increasingly fast-paced, global environment could be left behind financially and socially.

Because the rewards are great, the flexible body—which, I must mention, is not always the healthiest body—is becoming increasingly commonplace in the workforce and other competitive venues. If it becomes too ordinary, then there will be a contest to surpass it—in fact, the race has already begun. I will return to the concept of “flexibility” in Chapter Five. The next step, which is the subject of the next section, is to turn the flexible body in to a flexible *nobody*—or to dissolve the body, at least in part. The body of the future is cyborgic, or part machine.

The Posthuman

“Bodilessness” is as much about creation as it is about dissolution—to put a positive spin on what could be construed as a potentially nihilistic premise. As Giddens

⁸ This subject did not end up using a hormonal contraceptive and became pregnant before planned.

argues in his discussion of reflexive projects, “[b]odily regimes...are the prime means whereby the institutional reflexivity of modern social life is focused on the cultivation—almost one might say, *the creation—of the body*” (1991:100, italics mine). While he limits his discussion to the invention and reinvention of the self through reflexive projects, he could be alluding to the literal bioengineering of the cyborg body in the line that I have italicized. In this latter part of the section on the body, I will briefly venture where Giddens did not and will explore the connection between body projects and the development of a posthuman, rather than a late modern, mode of being. This section will show that the themes of this chapter are real and not just part of a theoretical exercise. The postmodern-paleolithic can be instantiated in a literal body of work—or through a physicality that has been worked and reworked on, or enhanced via the incorporation of biotechnologies. Every day it is becoming increasingly evident that non-organic, nonhuman accoutrements to the human body are a ubiquitous and vital part of our lives (Rose 2006).

Most simply stated, the posthuman is a flexible body with nonhuman addendums. Like cybernetics and cyberspace, this corporeality can challenge both time, as we have seen, and space—it can defy its inherent physical limits (this section could be called “spacelessness”). What is more, it can contest the gender that has been assigned to the physical body. In her well-known *Cyborg Manifesto*, Donna Haraway argues that, “biotechnologies are the crucial tools recrafting our bodies. These tools embody and enforce new social relations for women world-wide...Biology here is a kind of cryptography,” (1985:366). Haraway believes that women can use biotechnologies to change history and finally free themselves from their so-called reproductive destinies.

With their bodies altered in an ever-growing number of ways, women may now be able to assume roles that they could not, or at least could not with any ease, ever before.

As mentioned in the previous subsection on flexibility, hormonal contraceptive routines, especially those that entail the use of continuous hormones, are examples of biotechnological therapies that can potentially suspend and perhaps even discharge the female body from its reproductive-related functioning. Specifically, these regimens can be used to postpone or completely prevent childbearing (and thus nursing and other common aspects of childrearing), as well as ovulation and menstruation. Because their users are not necessarily occupied with these habitual experiences and major life events, their either continuous or habitual relegation to the domestic sphere is no longer justifiable according to traditional reasoning related to the sexual division of labor. Moreover, with the use of birth control, their bodies are less likely to be viewed as vulnerable to the outside world and thus in need of relegation to a setting that may offer them the protection that their penetrable bodies supposedly cannot. With the use of continuous contraceptives, in particular, women's bodies are less likely to be viewed as leaky because, at least in theory, the most obvious and culturally repugnant type of leaking is suppressed. In sum, the female body can be refigured with the use of biotechnologies such as menstrual suppressants. As a result, women may begin to redefine their roles both inside and outside of the home.

It is important to bear in mind that not all biotechnologies are intended to renegotiate sex and sex roles. In fact, many are designed to do the opposite and perhaps even reinforce sexual dimorphism—and likely gender stereotypes as a result. Breast augmentation surgery could be offered as an example—and birth control could possibly

be another. When my interviews would turn towards a discussion of female liberation, a few of my subjects maintained the position that hormonal contraceptives are used to characterize women's "natural" functioning, and women by extension, as out of control and in need of subjugation. In particular, it was continuous contraception that was particularly problematic for some interviewees. Reasons for this position varied, but perhaps most persuasive is the fact that these contraceptives are almost unanimously designed to change the appearance of a woman's reproductive functioning, rather than that of a man. One must wonder why society is not making it easier for women to accomplish everything that they need to without almost necessitating intervention. I will not share any of my subjects' opinions of how biotechnologies may be redefining sex roles here because I will explore this topic in detail in Chapter Five.

For now, I will only argue that physical, rather than theoretical, elements of the posthuman exist. To me at least, the reconstruction of sex and the body seems to be occurring more quickly and more palpably than is the reformation of gender and other cultural constructions. Social scientific research on trans- and inter-sexuality shows that (re)assigning sex is easier than changing ideas about gender (Johnson 2006, Preves 2000). While the continuous contraceptive user's body is constantly being supplemented with exogenous hormones, she is physically cyborgic—but is not a Harawayan cyborg. While at least in theory she has overcome some of the limits of her body, she is not living in a truly postfeminist society. Social constructs still exist. Sex may be refigured but not necessarily gender. Capitalism is without a doubt the *modus operandi*. Time may be recalibrated but not forsaken. We are still mortal. In essence, the postmodern-paleolithic

body does not commit itself to the same poststructural radicality that does the Harawayan cyborg.

N. Katherine Hayles (1999) offers another definition of a cyborg, which is intended to say more about our potential to dissolve humanness rather than gender—or our ability to reconfigure a biological construct as well as social category. She says that “...cybernetics can be used not only to correct dysfunction but also to improve normal functioning. As a result, the cyborg signifies something more than a retrofitted human...” Here, it is almost as if Hayles is describing the postmodern-paleolithic body explicitly, which is also an enhanced, yet “retro”—or “Paleolithic”—human. She continues, however, “...[i]t points toward an improved hybrid species that has the capacity to be humanity’s evolutionary successor” (119). While Hayles’s cyborg may be “retro” and posthuman, the postmodern-paleolithic body is not capable of breaching biological laws in order to become “humanity’s evolutionary successor,” or another species. It is still very much a human in situ. Even though the signs of human mortality, such as wrinkles and blood, can be suspended or even permanently blocked via a posthuman biotechnological intervention, our passing is still inevitable. People are still humans and not machines that can live forever so long as you change their parts. In effect, while elements of the posthuman exist in late modernity, cyborgia is not a reality. The answers to our late modern problems still lie as much in our early human past as they do in the posthuman future.

A medical conference presentation featuring Andrew Kaunitz shows how a retrofitted-cyborg, or postmodern-paleolithic, way of thinking could result in progress. As featured in the documentary *Period: The End of Menstruation?*, Kaunitz, a practicing

gynecologist, prolific researcher, and site tester for the Seasonale, speaks at the 2006 meeting of the Association of Reproductive Health Professionals (Chesler 2006). After comparing modern American and hunter-gatherer women's total lifetime number of cycles and discussing the various health problems attributable to the former group of women's so-called "incessant" cycling, he says, "Recent FDA approval of Seasonale extended-use oral contraceptives—this will bring another, major, advance for my patients and for women in this country..." In this line, he conveys his belief, which is becoming increasingly common if marketing and sales provide any indication, that through the use of continuous contraception, we can turn a state of risk into a state of progress—the most admirable goal of a posthuman trajectory.

Conclusion

Because the introduction of new biotechnologies has had both positive and negative consequences for the individual and for society, the future is often characterized as one of two extremes: apocalyptic and disastrous, or exhilarating and life-renewing (Hayles 1999). Often a feature of the first characterization, the cyborg is believed to have no sense of historicity and no grounding; its world is untested. Although we entertain elements of the posthuman, we are not cyborgs yet—at least we are not the cyborgs that poststructuralists have envisioned. Unlike the cyborg, what I have called the postmodern-paleolithic body, which is the burgeoning progeny of both evolutionary and bio- medicine, is receiving the latter characterization, as its increasing popularity and profitability demonstrate (Chapter Four will explore the growing appeal of "paleo-rhetoric" and "paleofantasies"). This contemporary phenomenon entails elements of

premodern and posthuman subjectivities; it is the best of two imagined worlds. These worlds lie to either side of late modernity and are thus presumably free of its ever-growing number of risks—which explains their appeal.

Since we are mired in risks, we have become crafty in our metaphysics. While we members of late modernity do theoretically permit backwards time travel, endless self-exploration, and cyborg-like body transformation, or “timelessness,” “selflessness,” and “bodilessness,” as is demonstrated with the use of continuous contraception, we remain moderate in our deconstruction, at least at the level of practice. In other words, we are not yet postmodern. As Giddens has argued, we may be best described as “late modern”—neither broken with the past nor socially unevolved since modernity. Although I agree with Giddens’s categorization of the contemporary age, I offer “postmodern-paleolithic” in this chapter to highlight today’s increasingly paradoxical nature. For starters, while we are constantly engaged in global revolution, we hope to achieve time-honored goals. Likewise, while we have more rules than any other society that has ever existed, the world seems riskier than ever before. Moreover, while we want to be cyborgs, we also want to be Stone agers.

While we seem to be running in place, we must somehow be making headway, since people have been living longer. Because we believe that we can use biotechnologies to reclaim both our physical and mental health—that there is hope—the contemporary logic is fundamentally optimistic and thus modernist, and not postmodernist, at heart. Although critics may argue that the notion of progress is just a part of a capitalist scheme, in truth, it has been around far longer than sales or bartering. Just like our earliest ancestors, we believe that we may one day impose order on the

chaos that characterizes contemporary living. Thus the resurrection of premodernity is ultimately a move which sidesteps an unconditional acceptance of postmodernity, late capitalism, and all of the anxieties that ensue with them. While we take steps forward, we remain firmly rooted in the past. Here we find a safer, more familiar place and time than we would in the non-reflexive, and thus nonhuman, future.

Chapter Four: Anthropological Fantasies in the Debate over Extended-Cycle Contraception

If we look way back, generations ago to ... hunter-gatherer women, instead of the four to five hundred menstrual cycles that women today experience, in the prehistoric time, women experienced fewer than two hundred menstrual cycles. —Andrew Kaunitz, MD (Period: The End of Menstruation? 2006)

In recent years, expert and popular discourses around continuous contraception have become the sites of the unlikely juxtaposition of archetypal images of modern and prehistoric women. On the one hand is a bubbly American go-getter on the fast track, and on the other is a hardy, fecund, prehistoric hunter-gatherer. The first woman, who is portrayed in commercials for extended regimen contraceptives on US television, twirls through her day, whether she is calling the shots at her nine-to-five, DJing on the weekend, or pondering existential dualisms in her spare moments. By contrast, the life of the prehistoric woman—which is depicted at more specialized venues such as medical conferences, grant proposals, patient consultations, and research study recruitment sessions—appears to be slower; every day she takes care of her young children while gathering food for the rest of her extended family. Although they live in different worlds, these two healthy, frequently amenorrheic women emanate from the same imagination—that of the pharmaceutical clinicians and marketers of the latest generation of hormonal contraception.

As an anthropologist, I have been especially struck by the reliance on anthropological theories, concepts, and images in the discourse about continuous contraception. In this chapter, I examine the impact of this anthropologically-inspired “paleo-rhetoric” across a range of informants with widely varying investments in the

debate over continuous contraception, including biomedical researchers, physicians, popular science writers, and young women contemplating their contraceptive options. I use “paleo-rhetoric” as a shorthand to refer to the concepts, language, and images borrowed from biological anthropology and other evolutionary sciences that are used to promote popular health trends as well as an ideal female persona, or what I call “paleo-woman,” who embodies the basic tenets of this rhetoric.

A principal objective of my research is to illustrate and analyze how the production of knowledge occurs communally rather than unilaterally among medical, pharmaceutical, academic experts, and patients. Because there is a such variety of discourses influencing women’s attitudes toward suppression—inspired by biology, religion, folk wisdom, economics, ecofeminism, and postfeminism, to name just a few—I found the young interviewees’ stances to be far more complex and convoluted than those of the experts. Furthermore, I show how anthropological discourses further complicate the already densely textured debate for women who are undecided about the practice—which describes almost half of my interviewees. Fundamentally, I ask if women are accepting and proffering the emergent paleo-rhetoric, and if so, how does it serve to intensify the stakes of continuous contraception? I also seek to understand how this discourse, and the many others that women also drew on when discussing continuous contraception, are impacting practice. Are women’s hormonal contraceptive practices as complex and convoluted as their attitudes towards these pharmaceuticals’ designs?

In the first half of this chapter, I explore some of the ways in which experts, including biological anthropologists and pharmaceutical clinicians and marketers, and non-experts, specifically young women, have adopted and deployed paleo-rhetoric and

other anthropologically inspired language. I also critically examine how this rhetoric has been marshaled in their constructions of the paleo-woman and her biology. In the second half, I examine the ways in which experts have represented and co-idealized the two contrasting amenorrheic women, the postfeminist on the one hand and the paleo-woman on the other. I conclude by discussing how the co-creation of these contrasting female personas raises an important feminist concern: each in their own way, these figures personify society's increasingly fantastic and thus largely unattainable social expectations for women.

Experts' Deployment of the Paleo-Woman Fantasy

At least since the time of Galen and continuing into the era of modern biomedicine, physicians have interpreted menstruation as a sign of wellness. However, for some advocates of evolutionary medicine, who promote the healthy "primitive" body, the meaning of menstruation has recently been inverted; it now signifies the devolution of women's health (Coutinho and Segal 1999; Eaton et al. 1994:355). In the late seventies, biological anthropologists and other scientists began to document the role that lactation plays in suppressing menstruation in so-called primitive societies (Anderson 1983:28; Harrell 1981:801). By the nineties, they were arguing persuasively that American women experience excessive ovulation, cycling three times as often in their lifetimes as women did in premodern times (Eaton et al. 1994:355; Strassmann 1997:193), as discussed in the previous chapter. They hypothesized that our bodies were not designed to menstruate so frequently and that the increase is resulting in unnecessary ailments, both acute and chronic. Since then, frequent menstruation has been linked with a host of serious

pathologies, including dysmenorrhea, endometriosis, epilepsy, anemia, and premenstrual syndrome, as well as such diseases of modernity as arthritis, asthma, and cancers of the breast, endometrium, and ovary (Andrist et al. 2004:359; Eaton et al. 1994:355; Spicer and Pike 1993:180).

Using data from biological anthropology, some physicians are now recommending that their female patients use continuous contraception to prevent what they term “incessant” ovulation and menstruation. As discussed above, medical symposiums are perhaps the most common venue in which researchers discuss and sometimes directly cite anthropological literature. Most prominent among these researchers are Andrew Kaunitz and Leslie Miller, who exhibit the intersection of gynecological and paleo-rhetoric during conference presentations that I have accessed via film and the web, respectively.

In the 2006 documentary, *Period: The End of Menstruation?*, Kaunitz, a site tester for Seasonale, speaks at a gynecology meeting. As already revealed in this chapter’s opening quote, he states, “If we look way back, generations ago to ... hunter-gatherer women, instead of the four to five hundred menstrual cycles that women today experience, in the prehistoric time, women experienced fewer than two hundred menstrual cycles.” While he speaks, his PowerPoint shows a slide titled “Frequent Menstruation Is a Relatively New Biologic State.” A graph with two bars represents “Hunter-Gatherer Woman” and “Contemporary Woman.” Below this, he cites Eaton, Konner, and Shostak, the bioanthropological team responsible for “Stone Agers in the Fast Lane” and many other provocative ideas from the field of evolutionary medicine. In the 1988 “Stone Agers in the Fast Lane,” Eaton, Konner, and Shostak argue that our

bodies are hardly different than that of our Paleolithic ancestors (1988:740). Our behavior, however, is quite dissimilar, making us poorly suited for our modern environment.

Similar to Kaunitz's citation of Eaton, Konner, and Shostak, Miller has referenced the anthropologically-inspired research of Roger Short at a medical conference, as a PowerPoint available on NoPeriod.com, indicates. The slide of interest offers a cross-cultural comparison of Western and !Kung women's menstrual patterns. The !Kung of the Kalahari are a modern foraging group who have become archetypal paleo-women and men. Their abbreviated menstrual careers have been of great interest since Short described them in 1976 (Short 1976:18). They are taken to represent all people, from all eras of time, who have adopted this subsistence strategy despite the arguments of biological anthropologists such as Beverly Strassmann and Robin Dunbar, who, as previously mentioned in chapter three, have criticized scholars of evolutionary medicine for universalizing an immensely diverse time period and an incredibly disparate group of people (Strassmann and Dunbar 1999:91). In any case, Miller, like Kaunitz, illustrates the belief shared among many women's health specialists that anthropological findings will prove compelling and persuasive to an audience of medical doctors and researchers.

Miller's inclusion of this data in her proposal nicely illustrates how medical doctors and researchers use anthropological data to raise the stakes of cutting edge biomedical research. NoPeriod.com provides another example of the use of anthropological data to support the use of continuous contraception. The site contains a copy of Miller's 2006 NIH grant proposal titled "Induction of Amenorrhea With Continuous Use of the Oral Contraceptive" (Miller 2006). Miller begins the

“Background and Significance” section of the proposal by citing Beverly Strassmann, S. Boyd Eaton, and Roger Short. Eaton and Short’s contributions to the discourse of continuous contraception have already been mentioned. Strassmann studied the menstrual careers of the Dogon of Mali (Strassmann 1997:193). Each night during her two and a half years of fieldwork, she monitored the community’s menstrual huts and discerned that Dogon women reached menarche later than contemporary American women, had their first pregnancy earlier, and spent more overall time pregnant and lactating. She hypothesizes that frequent cycling is likely deleterious for women’s bodies, based on the increased incidence of reproductive cancers.

Besides disseminating anthropological narratives among their peers, medical experts are historicizing (and prehistoricizing) menstruation when deliberating its suppression with patients and research subjects. For example, when discussing hormonal contraceptive options during consultations with her patients, Miller sometimes places menstruation within a historical framework. In an interview, she tells me, “I think if you don’t put it in context of history, of biology, it doesn’t click... [if you do] they make the link [and think] ‘[w]ell actually it’s not natural—you’re having contraception and you’re not getting pregnant.’ Nature meant you to be pregnant and breastfeeding” [S19].

Likewise, Patricia Sulak, who again is another prominent supporter of continuous contraception, adopts an evolutionary rhetoric to support the use of continuous contraception in her research studies’ recruitment sessions. At an enrollment event for her latest clinical trial, she argued that “[w]e were not biologically designed to have a few hundred periods. We were not designed to menstruate for decades... We are deviating biologically from what we were supposed to do” [S6]. Here, Sulak appeals to

evolutionary anthropology in order to intensify the persuasiveness of her argument.

When describing what she refers to as the traditional design of the Pill, which includes a hormone free week that induces withdrawal bleeding, she has said, “That’s like driving a Model T. We can do better than that now.” This analogy recalls “Stone Agers in the Fast Lane”—both describe our bodies in terms of low horsepower, using what Emily Martin (1999:97) would call a machine metaphor. This allusion to our ancestors, along with those offered by Miller and Kaunitz, illustrates how the most influential individual promoters of continuous contraception in the US are evoking paleo-rhetoric to problematize menstruation in provocative new ways, in order to extend the appeal of the practice to more social worlds.

Women’s Interpretations of Anthropological Allusions

Sulak is not the only non-anthropologist who has developed her own version of “Stone Agers in the Fast Lane.” This section will discuss how non-experts, specifically the young women that I interviewed, demonstrate a familiarity with paleo-rhetoric and classic anthropological themes, suggesting that these ideas are widespread, reaching anthropologists and non-anthropologists, medical experts and non-experts alike. Many of the informants exhibited an anthropological aptitude in their interviews, and I have organized relevant excerpts into three rudimentary types: “Stone Agers Revisited,” “Energy Efficiency Model,” and “The Red Tent Argument,” respectively.

Just as Sulak did with her “Model T” metaphor, both women who support and women who oppose the use of continuous contraception have related their own versions of “Stone Agers in the Fast Lane” to me when discussing the history of menstruation.

“Stone Agers Revisited,” which six subjects (13.6%) evoked artfully after being prompted to discuss this history of menstruation, typically employs images and metaphors of prehistoric stoicism. For instance, regarding our so-called stone-age bodies, one informant says:

My body can overcome this... Years ago I would have to just deal with it and get over it and get stronger. Back in the day we didn't have this stuff. And obviously we're still here... People back then had to get over it and continue to live and reproduce. And those that couldn't died off... [13]

This interviewee equates our physicality with that of our ancestors. Another woman who recapitulates “*Stone Agers*,” subject four, explains, “Our evolution hasn’t caught up with our technology. So I just worry, what are we actually doing to our bodies? ... Modern medicine only came around in the past century or so. And that is not enough time for evolution to run its course.” Again, the informant considers the relatively slow speed at which human bodies evolve.

Four subjects (9%) spontaneously have depicted our “Stone Age” bodies in using machine metaphors, in their renditions of what I call “The Energy Efficiency Model.” This explanation of why menstruation is sometimes dispensable is similar to Strassmann’s hypothesis that while monthly menstruation is an energy-saving adaptation in one sense (Strassmann 1996), events such as pregnancy and lactation should frequently suspend it (Strassmann 1997:196). According to Strassmann, maintaining a continuously fertile state would be costly for our bodies, as would be having decades of uninterrupted monthly menstruation. Pro-suppression interviewees are familiar with an abridged

version of this theory and describe monthly menstruation as simply as this interviewee⁹, subject 13, who says, “Nothing’s really happening from it. It’s just waste.” Another woman, subject five, elaborates, “I think not having a period, or having less periods, definitely saves your body energy... You lose blood and iron and everything when you’re on your period... It’s physically probably a little more healthy not to have one that often.” Women whose diets need iron supplementation, like this informant, frequently employed this anthropological model in our interviews.

While the “Energy Efficiency Model” is used almost exclusively by the pro-suppression interviewees, what I call “The Red Tent Argument” has mostly served the anti-suppression group (75% of this contingency, as well as 30% of the “moderates” and 7% of the pro-suppression group). *The Red Tent* is a novel by Anita Diamant that explores how female power and solidarity can arise in conjunction with menstrual customs (1998). Rather than reference findings from evolutionary anthropology, these women elaborate on “The Red Tent Argument” when prompted, to offer ecofeminist reasons for preserving monthly menstruation. Besides harming their bodies, they believe that synthetic hormones damage the larger social and physical environments. In addition, they often refer to menstruation as a something special that distinguishes them from men. Although some anti-suppression subjects assert that one does not even need to have a period, nor even a uterus, to be a woman, they still frequently describe menstruation as a natural, normal, and universal part of womanhood. Subject eight, who could be described as a “feminist-spiritualist menstrual activist” (Bobel 2010:66, 68), explains, “There’s just something historical and cultural about it... It’s not like you’re the only

⁹ This informant actually started her interview strongly opposed to continuous contraception but seemed to change her mind the more she talked, as demonstrated here, where she describes menstruation as “waste.” She was the only informant with strong views that temporarily flip-flopped.

person with a period. All women, everywhere, in all societies ...menstruate... That ... is I guess what makes it seem so natural.” Sounding like a junior cultural anthropologist, she appreciates the fact that across time and space, menstruation remains a common experience for most reproductive-aged women.

One interviewee recalls her initial eagerness to menstruate and be like other women:

I looked so forward to my period...it was such an adventure for the girls in my family. You got to stay up, and that day you got to watch movies and eat junk. It was like this welcome to womanhood... All the mothers called the aunties... I felt like I was becoming one of them. [S17]

Reminiscent of anthropologist Victor Turner, who is remembered for his work on rites of passage, “Red Tent” supporters frequently describe menarche as an initiation rite that results in a girl’s induction into maturity. Throughout their lives, many women repeatedly affiliate over the experience of menstruation with their female friends and family, and even at times with strangers in the restroom. Nevertheless, many of my other informants bond just as easily over discussions of birth control, including cycle-stopping contraceptives, and according to my informants, a few of them are beginning to replace “period talks” with “suppression talks.” After years of menstruating, these women say that period talks can grow stale and that hormonal contraception, which is often new to them and subject to personal experimentation, may stimulate more interesting discussion.

The “Red Tent” practitioners, along with the subjects who employ the “Stone Agers” and “Energy Efficiency” prototypes, demonstrate a knowledge of and appreciation for the rhetoric, theories, and themes of biological and cultural

anthropology. They show how the discipline is not only relevant but critical to an understanding of the wide-reaching consequences of continuous contraception. Together, the three models, combined with the paleo-rhetoric demonstrated by the experts in the previous section, illustrate how health knowledge moves between social worlds and how that circulation enriches the debate over continuous contraception. Promoters of this practice not only unearth the paleo-woman archetypes, but, as we will see in the next section, they have also discovered what at first appears to be her antithesis, the postfeminist—or the feminist whose ideological goals have been reached. In their sensationalization of these contrasting figures, promoters of continuous contraception campaign for a new, unachievable feminine ideal.

What Postfeminist and Paleo-Allusions Mean for Contemporary Women

The desire to correct the supposedly ill-designed female body is not new. As mentioned in Chapter Three, some medieval holy women starved themselves and suppressed menstruation, in part to overcome their bodies' carnality (Bynum 1987:202). Today, body enhancing projects are increasingly widespread throughout society due to the pressures of biopower (Rose 2006:20), which describes the means through which intuitional powers regulate the lives of their constituents. While the modern quest for self-identity may lead to restrictive eating, it more frequently entails the opposite—consumption. Unlike the medieval holy women who refused to consume, we use pharmaceuticals and other enhancement (bio)technologies, the quintessential Foucauldian technologies of the self, in the pursuit of our optimal selves (Elliott 2003:xvii; Mamo and Fishman 2001:14). As consumption has become a primary, if not

the primary, means of asserting individuality today, medicine has become a multi-trillion dollar industry in the US, as previously mentioned. Accordingly, medical consumption has now become a principal mode of self-expression, as we are inclined to believe that the disciplined and controlled body reflects a healthy core self.

The pharmaceuticalized body is now the norm (Dumit 2002:126; Greene 2007:236), especially the pharmaceuticalized female body, which is often viewed as deficient when not supplemented (Fishman and Mamo 2001:180; Metzl 2003:128). As a consequence, ethinyl estradiol and progestins, the main ingredients found in hormonal contraceptives, have become the most widely consumed drugs in history (Oudshoorn 1994:9). Through the use of extended regimens, the female body may be less pathologized and stigmatized, and women can finally perceive themselves as closer to the culture side of the nature/culture dichotomy. As in all binaries, there is an implicit hierarchy in this fundamental dualism. Although there are many exceptions in the West and cross-culturally, theorists have persuasively argued that “culture” is commonly equated with masculinity, which is generally esteemed, and “nature” with femininity, which is typically deprecated (Ortner 1974:73).

Contemporary marketing campaigns feature what could be considered ultra-cultured women, and a 2007 commercial for Seasonale is a perfect example. The pharmaceutical’s users are depicted as intensely cosmopolitan; they are happy, healthy, smart, self-assured, sexually liberated, creative, attractive, fashionable, physically fit, multiethnic, twenty and thirty-something-year-olds who invariably like the color pink. Throughout the commercial, these fictitious contraceptive users perform executive tasks, practice yoga, create abstract art, and shop for shoes. They are able to balance their fast-

track careers with their equally exciting social lives, while somehow finding time for themselves. The postfeminist woman that Seasonale hopes consumers will aspire to be is an amalgam of these characters. Notably, the deployment of the postfeminist woman is not particular to Seasonale and Seasonique's marketing; rather it is a widely circulating convention (Negra 2008:2) that has come to characterize hormonal contraceptive and menstrual product advertising.

The postfeminist woman proffered by these advertising campaigns is best described as "flexible." Emily Martin insightfully analyzed the widespread circulation of this term, as described in Chapter Three. Her argument that "[f]lexibility is used to characterize the most desirable personality, the highest form of intelligence, and the species most likely to survive" is highly pertinent to an understanding of the deployment of evolutionary rhetoric (Martin 1999:107). Before Martin, David Harvey, as previously mentioned as well, also relied on the concept to characterize the ideal postmodern worker as someone who is "adaptable, flexible, and if necessary geographically mobile" (Harvey 1989:150). Here flexibility refers to one's ability to remain afloat and perhaps even surge ahead in a capitalist economy. Such entailments resonate with the Seasonale slogan that promised "Fewer Periods. More Possibilities", unmistakably suggesting that the pills remedy more than just menstruation. The slogan could be translated "Fewer Female Problems. More Profitability."

Increasingly, we treat humanness unmediated by technology as a handicap, especially in the workplace, where machines are rapidly replacing people. The flexible body, which is part human and part biotechnology, can be interpreted as a proto-cyborg. In her influential *Cyborg Manifesto*, Donna Haraway explains this kind of hybrid

subjectivity in which “[t]he dichotomies between mind and body, animal and human, organism and machine, public and private, nature and culture, men and women, primitive and civilized are all in question ideologically” (1991:163). My informants revealed, however, that they are not comfortable with the physical embodiment of all these dualities, particularly the organism and machine dichotomy. They prefer to consider the biomedicalization of their bodies in terms of the related, but softer and more familiar, nature and culture dualism. While some informants deconstruct the term “natural” when I ask about its connotation, most of them are not critical of the concept. In fact, they deliberately position themselves closer to the nature side of the nature/culture dualism. Because they are not ready to depict their subjectivity as literal hybridity; they do not envision themselves as machinelike, even if only partially. It is perhaps for this reason that pharmaceutical promoters stop with the promotion of flexibility and do not champion full-fledged cyborgia.

Having marketed the image of the postfeminist woman for what seems like years now, pharmaceutical promoters (specifically medical researchers) have decided to intensify their campaigns and endorse a more evocative and specific version of the nature and culture dualism, namely the primitive and civilized dichotomy. In this strategy, we can detect what Leslie Aiello has termed “paleofantasies” (Zuk 2009:5), which influence many popular health-related discourses. Examples include the discourses related to infant nursing and feeding, birthing, dieting, exercising, dating, sleep, violence, stress, and even footwear—to name a few. Paleofantasies are perhaps most evident in dietary discourses, as the titles of the aforementioned following regimens indicate, which have been popularized by Loren Cordain (2002), Joseph Morse (2008), Elizabeth Somer

(2002), and Ray Audette (2000), respectively: “The Paleo-Diet,” “The Evolution Diet,” “The Origin Diet,” and “The NeanderThin Diet.” The idea underlying these paleofantasies is that via a return to an idealized, prehistoric past, balanced health, both mental and physical, can be attained.

Almost all the paleo-diet literature contains a chapter with a title akin to, “How to become a Modern Hunter-Gatherer.” But why would we want to be modern hunter-gatherers? It seems that the more civilized we become, the more we yearn for simpler days, for a time when our modern technologies, diseases, wars, and disasters presumably did not exist. The term “modern hunter-gatherers” as used in popular health campaigns is applied to both men and women, but in the case of continuous contraception, only women can embody this paradoxical identity. The same is true for infant nursing and natural birthing as well. However, the goal of these discourses is to encourage abstinence from the consumption of exogenous chemicals whenever possible. For continuous contraception, in contrast, synthetically-derived intervention is essential in order to approximate the desirable biology of the paleo-woman, that is, unless a woman spends decades of her life pregnant and/or lactating. Continuous contraception is thus perhaps the most paradoxical of all of the discourses emanating from the burgeoning field of evolutionary medicine. Women are situated at the center of the conundrum, and this position may have significant implications for their future health care. They may make health decisions based on what they think is most natural, but ultimately, the naturalness that they seek may not be available pharmaceutically.

Is the paradox beneficial or harmful for women? Does it complicate simplistic portrayals of female embodiment? Or does it set women up for failure, insisting that they

assume too many contradictory identities? Some women do not want to complicate female embodiment. They are already juggling too many identities, which may include the professional, the nurturer, the vixen, the lady, and so forth. Discussing disordered body perceptions, Anthony Giddens, whose following, important quote is repeated from the previous chapter, argues, “Anorexia should rather be understood in terms of the plurality of options which late modernity makes available—against the backdrop of the continuing exclusion of women from full participation in the universe of social activity which generates those options” (Giddens 1991:106). Women who choose to suppress menstruation do not necessarily have body dysmorphic disorder, nor are they suffering from a false consciousness in their attempts to fit into a system that continuously excludes them. Nevertheless, they often grow weary of society’s extensive expectations. Based on my data, some women consider the deployment of postfeminist and primitive woman to be a touch absurd in menstrual product and pharmaceutical promotions because female embodiment is so oversimplified. At the 2009 Society for Menstrual Cycle Research meetings, which focused on media messages, bouts of laughter could be heard throughout the keynote address, which featured contemporary menstrual product advertising from around the world. The subjects of these ads were almost always postfeminist caricatures. Of course, SMCR conference attendees’ reactions to these ads do not represent those of all women. But my more diverse constituency of interviewees also occasionally found the employment of the postfeminist in hormonal contraceptive promotion to be outlandish, as well.

Sometimes women cannot just shrug off the provocative images. One subject, aged 34, explained to me:

If you're a [career-oriented] woman ... and you choose not to have kids, then you go on the automatic crone train. If you go the other route [and] you somehow manage to have the kids and be superwoman, then you ... [get to be] the young woman, the slightly older woman, and then the grandma-crone-hag kind of lady. But there aren't many variations on the script. [S32]

The script to which this informant refers does not match that of a pharmaceutical or menstrual product commercial. Incidentally, this Seasonique user was a breast cancer researcher and has studied the effects of soy consumption on the elongation of the menstrual cycle. Convinced of the potential benefits of continuous contraception and tired of trying to be a “superwoman,” this single, childless woman continues her lament, “I think I liked it better when we were picking berries. At least we were all on the same page about that script. Now it's just a lot of confusion.” Even this successful scientist finds the paleofantasy more appealing than the superwoman—perhaps an omen of what is to come, as women increasingly tire of seeing their so-called plurality of options reflect back at them from their TV screens.

Conclusion

On the whole, my informants, expert and lay alike, seek to prevent the long list of chronic maladies that are associated with frequent ovulation and menstruation, and they are particularly concerned about reproductive cancers. Many of them believe, however, that the best way to protect their bodies from the dangers of civilization is to abstain from using the newest, and what they regard to be least tested, chemical interventions. Most of the informants who were against the idea of menstrual suppression becoming a common

practice argued that the menstrual cycle should only be manipulated when it regularly causes a woman a significant amount of discomfort; they did not think that menstruation should be suspended for convenience only. When I mentioned the relatively recent co-evolution of frequent ovulation and menstruation and certain cancers, of which many of them were not aware, a significant portion of the women expressed more willingness to consider the benefits of continuous contraception. My objective was not to alter anyone's attitudes but rather to assess various discourses related to suppression to see which could be most compelling.

The theory that women are menstruating an estimated three times as frequently as their ancestors came as a surprise to almost all of my informants; however, there was one remarkable exception. This informant explains:

I read a really persuasive chapter ... when I was in college that was sort of all about menstruation... Maybe you've read it—it was in *The New Yorker* maybe in 2000. It was about how we think a period is normal but actually, for most of history women didn't have regular periods because they were pregnant all the time, or they were starving all the time.¹⁰ Actually a regular period is really actually abnormal in history. That was what the chapter was about. And it was saying that some people think that suppressing periods can help prevent cervical cancer and everything. So I read that when I was pretty young... I was 19, and I thought it was well written and made sense. [S50]

This final interviewee, number fifty out of a scheduled fifty, first learned about incessant ovulation and menstruation and the paleo-rhetoric that supports suppression not in our interview but in the pages of a magazine. Malcolm Gladwell's *The New Yorker* article titled "John Rocks' Error" (2000) convinced her to try Seasonale when it debuted a few years later. This informant shows how persuasive anthropological rhetoric can be—on

¹⁰ In this article, author Malcolm Gladwell did not actually argue that starvation was a factor determining our ancestors' abbreviated menstrual careers.

the spot, she is ready to discuss the chapter a decade after reading it. While most of the chapter's readers probably do not remember it a decade later, they may remember its lessons, which they may have passed along. Like the others that I have quoted, this interviewee illustrates how young women are sharing and shaping the discourse of continuous contraception discourse, and specifically how they are increasingly apt to draw on anthropology to do so. Since she was a teenager, this interviewee has been on four different hormonal contraceptive regimens, one of which was designed to suppress bleeding and the rest of which she has occasionally manipulated to induce suppression. Sometimes she really appreciates hormonal contraception and all its possibilities, and other times she feels like purging her body of exogenous hormones. As with the majority of my interviewees, her practices are fluid; she responds to a variety of discourses, some of which ring truer at certain moments in her life. The anthropological ideas, however, have endured.

As the debate over continuous contraception debate continues to intensify, we can expect to see more and more pro-suppression chapters like Gladwell's. The debate will be considered from every angle, as Sievert has shown (2008:182), and based on my research, I hypothesize that the arguments that raise the stakes of menstruation the most will prove to be the fittest. These discourses will ultimately present this topic as a matter of life and death that not only affects individual women but the human species at large. With the help of anthropology in particular, continuous contraception is no longer just a convenient option for a select group of women; it is now an issue pertaining to women not just of today, but of the past and future, as well. This debate raises fundamental anthropological questions about who and what we are and where we are going. Are we

Stone Agers in the fast lane who *should* be accelerating? Or are we cyborgs who should be making a u-turn? Which are more dangerous—our bodies or our technologies? How long will women have to juggle their paradoxical subjectivities? The search for the answers to such feminist and anthropologically inspired questions will increasingly influence our consumption habits, as well as our medical practices.

Chapter Five: Continuous Contraception and the Transformation of Gendered Relationships

We have been so focused on safe sex and pregnancy prevention—and rightly so—that we've kind of forgotten about the other part of being a woman and being sexually active, which is understanding how our bodies work and how we relate to people.
[S14]

While many who support the widespread use of continuous contraception believe that these pharmaceuticals will protect and perhaps even enhance women's bodies both immediately and in the long-run, it is unclear if and/or how menstrual suppression will affect gender relations and the construction of the female gender. Traditionally associated with nature and fertility (Ortner 1974), the concept of femininity—by which I refer to the gendered experience of being a woman—may be uprooted if women are no longer commonly viewed as reproductive vessels, or in terms of their purported capacity for childbirth, childrearing, and domestic work/relegation in general. If my interviewees did not candidly speak to the subject, I prompted them to consider how gender relations and the concept of femininity might be different if monthly menstruation ever became an anomaly in the US. While some women responded to this hypothetical question rather loquaciously, others found it difficult to answer—especially those who were unfamiliar with the language and concepts that are fundamental to gender studies. Many of these women spoke more readily about how menstruation and birth control figure within their own existing relationships involving the following: the institution (i.e. the field of medicine and medical doctors specifically), men (primarily significant others but also family members, friends, and coworkers), other women (mostly friends, mothers, and acquaintances), and themselves. This chapter will examine how each of these types of

interpersonal and intrapersonal relationships affects decisions about hormonal contraception, which are usually a woman's responsibility. The chapter will also question how the medicalization of menstruation/hormonal contraception and the popularization of continuous contraception might affect multiple social worlds' attitudes towards women's health, and women as a whole by extension, as these regimens work to prevent two of the most well-established hallmarks of womanhood—pregnancy and menstruation.

Women and Physicians

Asymmetrical Relationships

The first shifting relationship that will be explored is that which exists between women and the institution. Although the medical establishment does not by any means represent all social institutions, it is a most vital and familiar setting, and a place in which archetypal gender relations are reproduced and perhaps renegotiated. First, I will examine some of my subjects' negative experiences with their doctors and/or other healthcare providers, and subsequently, I will show how these relationships' shortcomings facilitate the perpetuation of ignorance about women's bodies. Then, I will discuss my subjects' efforts to improve the doctor-patient relationship. This subsection will segue into an exploration of how the medical establishment, specifically the field of gynecology, is also endeavoring to create a more woman-friendly environment. Finally, I will mention some of the challenges that remain for women when it comes to seeking the help of the medical establishment to minimize the unpleasant and perhaps even

detrimental aspects of their cycles. On the whole, the gynecologist-patient relationship serves to exemplify how institutions, specifically the highly esteemed medical institution, are greatly contributory to the continuation—but also the revolution of—gender biases and constructions of womanhood.

Although I share their complaints here, I suspect that the majority of my subjects' visits to the doctor's office were at least satisfactory and that those informants who had negative encounters were most likely to remember/recap these experiences in our interviews. I, for one, have generally had positive experiences with my doctors, particularly those in the field of gynecology. Moreover, I found each of the gynecologists, general physicians, nurses, and other health care personnel that I approached for help during the course of my fieldwork to be extremely amenable and generous with their time. Although my data may be somewhat biased as described above, cynical reports still surfaced frequently enough in the interviews, without prompting, that I am convinced that a significant number of medical personnel in the US should reconsider how they relate to their patients—particularly their female patients. Each of the quotes that will appear in this subsection describes my subjects' experiences with either their gynecologist or general physician who administers their gynecological exams and prescribes their hormonal contraceptives.

The physician-patient relationship is often asymmetrical in the US, usually as a result of an imbalanced distribution of power (Ainsworth-Vaughn 1992, Lazarus 1988). The following subject reveals how this unevenness has led to her dissatisfaction with not just one, but all, of her regular doctors. She feels that they, and her female gynecologist

in particular, conduct their examinations hastily and impersonally—so much so that she almost feels physically violated.

They want to get you in and out of the office as quickly as possible. It's all about just how much money they can make on however many patients they see. I don't think any doctor I go to knows my name. And my gynecologist—I almost feel used when she leaves the room because she runs in and out so fast. It's awful... I feel like they kind of brush me off a little. They don't take it as seriously as I do. [S25]

Some gynecologists stay and listen—yet *still* appear inflexible. As already revealed in the second chapter, subject ten's former physician was adamant that she not skip her hormone free pills and initiate menstrual suppression. The subject explains, “She kind of yelled at me about not taking my pills and I think about skipping my placebos... I think if I walked in there and told her I wanted an IUD, she would tell me to leave... I don't think she's really open-minded...” Here, the physician is portrayed as someone with a rigid agenda who can easily be perturbed when his/her authority is challenged.

It is not just private practice physicians whose perceived lack of patience and empathy distressed my interviewees. Describing her experience at Planned Parenthood, subject 24 says that she felt that, “they were kind of like churning out birth control.” Subject 17 is of the same opinion and states, “One of my friends...went to a Planned Parenthood, and she said that they were just shoving birth control down her throat.” While other informants had positive experiences at Planned Parenthood, it is alarming that these two young women felt that providers at the organization were “churning” and “shoving” contraception, which may not be what everyone woman wants or needs.

An important point to make here, which any feminist-minded medical researcher should consider, is how not only gender, but race/ethnicity, too, is a factor influencing access to quality health care. While on the topic of Planned Parenthood, subject 17 continues:

I feel like if you were to scan the city and look at just the areas where Planned Parenthoods are, then it's mostly urban, mostly minority neighborhoods. And when they (the minorities) go in there, the one thing [besides] of course condoms [that they push]...[is hormonal] birth control, [hormonal] birth control, [hormonal] birth control.

Here, it seems that certain health care professionals/services are not only biased when it comes to which regimens they will prescribe, as described in Chapter Two, but that they have an agenda when it comes to whom they offer these contraceptives. As a result of the different kinds of power inequities that exist between physicians and patients, many women are unaware of how their bodies work and how they could be managed pharmaceutically.

Perpetuating Ignorance about Women's Bodies

Physicians' hurried visits with patients leave many women as uninformed about their health as they were prior to their appointment. Even the nurses/research coordinators that I interviewed have expressed their concern that physicians are rushed and less than thorough when it comes to discussing birth control with their patients. One such informant, subject two, tells me "They (participants in Sulak's clinical trials) come to us, [and] they are like, 'My doctor never told me that.'" "That" could be any number of

things, but this subject was referring to proper dosing, specifically taking the pill at the same time every day, which serves to maximize the contraceptive's efficacy and to minimize its side effects. Similarly, subjects 32 and ten told me that they did not understand their contraceptive regimens. The first woman states, "I never figured out why the doctor decided on this course of treatment. It's very confusing." Meanwhile, subject ten, who is taking a hormonal contraceptive containing iron pills during her hormone free week (Femcon Fe), discloses her lack of understanding of this course of treatment, "I don't know. She never really gave me much of an explanation for it."

In addition to ignorance about dosing, the oftentimes brief and asymmetric conversations between gynecologists/general physicians and their female patients have resulted in the latter's general dearth of knowledge about ovulation, menstruation, and how each is affected with the use of hormonal contraception. Of course, a misunderstanding of the female reproductive life cycle starts early on and can commonly be traced back to grade school (Koff and Rierdan 1995), when many girls are first learning about their bodies. What is more, individuals should not just rely on their doctors. They should assume personal responsibility and research any pharmaceuticals and/or contraceptives that they use. Nevertheless, if physicians communicated more effectively, women would have better understandings of their bodies and how they could be manipulated if such a course of action was deemed appropriate. Below I reveal some of the misinformed statements that my subjects made during our interviews. As Patricia Sulak has concluded after decades of practicing gynecology, "Most women don't know why they're having a period." I share these statements in order to highlight just how ordinary a lack of knowledge about the female body still is, which is amazing considering

that we live in the Information Era—an age in which data on nearly everything is always just a click away. Obviously, women face certain challenges when accessing information about their bodies—perhaps taboos are still guarding it. Although each of the following statements shocked me, the more I heard, the more I understood how pervasive the lack of knowledge is and how much it needs to be rectified. I share so many of the misguided or erroneous statements because they, better than anything else, exemplify the misconception that women’s bodies are inexplicable and perhaps even unworthy of research.

As stated in the introductory chapter and again in this section, the ignorance starts at or before menarche.

I was in fourth grade, and I had a bladder infection. I thought I was on my period... I didn’t actually start my period until two years later, when I was eleven, and [when] she (my mom) wasn’t home. So I had no idea what to do... I was like, what’s happening to me? I’ve heard stories from friends who started and thought they were dying because they had no idea what was going on. [S11]

Other subjects remain confused about the purpose of menstruation or pill periods for years or maybe even a lifetime.

Maybe it’s like [we’re] snakes—maybe you want to renew that kind of stuff...Maybe it (the endometrial lining) just gets kind of old and dead like skin... [S8]

As with any cells, if you leave cells in there after a while they can start to mutate and become dangerous. I’ve had two or three gynecologists tell me that... [S31]

Some women are uncertain about the connection between their menses and their eggs and are, in all probability, unnecessarily anxious as a result.

I had a fear that I was born eggless... I want to have lots of kids. And so I just have this fear that when I [want to] start having them, they (my doctors) will be like “Oh, listen. You have no eggs.” [S13]

A couple of subjects—both of whom are longtime users of hormonal contraception and are speaking about their own pill periods—did not understand that hormonal birth control prevents conception by inhibiting ovulation.

You know that it (the pill period) is there and that things are working. It’s like saying my eggs are there, and they’re coming down. And they’re there. I’m producing eggs. [S16]

Even after the breakthrough bleeding, when I have my actual [pill] period, you’re saying ovulation didn’t occur? [S25]

Subject 25 is the speaker who reported feeling nearly “violated” by her doctors in a passage above. As a likely result of her lack of communication with her doctors, this former user of the pill and current user of the NuvaRing demonstrated little awareness of how hormonal contraception worked. Besides not even being familiar with the term “hormonal contraception,” she never knew that she could skip the hormone free week. Moreover, she had almost no knowledge of continuous regimens.

Although most of my subjects were familiar with continuous contraception, many were misinformed. A surprising number of the women did not understand that these regimens work the exact same way that traditional hormonal contraceptives (i.e. 28 and 24 day regimens) do—only the former are designed to reduce bleeding completely rather than partially. For reasons of which I am completely unaware and have every intention of discovering in future interviews or conversations, each of the following subjects believed that the use of continuous contraception might yield irreversible infertility.

I just wouldn't want to screw up my body and I guess decrease my chances of being able to get pregnant in the future. [S35]

I remember the gynecologist coming to talk to us, and he was saying how... the time where you get fertile again can be kind of long or something [after being on a continuous contraceptive regimen]... I just don't want to do anything to really harm my chances of fertility in the future. [S15]

If you take birth control (continuous contraception) too much maybe, it'll make you have menopause earlier, or too early... If it would not hurt me health-wise—if I would be perfectly fine, I would not care if I never had another period again. And I could still have children—I still want to have children... I don't want to mess...[that] up in any way... [S47]

I don't know if once you start taking it, you have to continue taking it for the rest of your life. [S30]

Would it mean that I become less fertile...? I would like to see it in print just to see, just to have peace of mind that this is what it will do. To kind of separate the myth from the truth basically. [S39]

Other subjects have related embellished accounts of other potential symptoms, which, in reality, would most likely be mitigated rather than increased with the use of continuous contraception. The first speaker quoted below is under the impression that monthly shedding still occurs for Seasonique users—but that it is stored in the body until three times as much of it has accumulated.

It was seven days of just bleeding buckets, literally (for a friend that was trying continuous contraception). And I know that sounds disgusting, but that's what it was.... I can't imagine women who would willingly do that. [S31]

I would love to not have a period—like those ones where you don't get it for three months. But I'm kind of scared of switching because I've heard people that go crazy on different kinds of pills and stuff... [S15]

What I've been told is that I'm more likely to get a pretty painful period if I do that (menstrual suppression), as opposed to doing it this way (21/7). [S10]

One woman was not even aware that monthly menstruation is not universal.

I figured it was something that everybody did—every female, every month. I honestly never stopped and thought that there are women that don't...That's a complete shock. [S28]

I could share even more misinformed commentary, perhaps in a section headed “Multiple Interviewees’ Random, Nonsensical Statements About Menstruation and Hormonal Contraception.” The point is not, however, to find diversion in the subjects’ misunderstandings, but to show how their lack of guidance is leading them to make ill-informed decisions that they might not be happy with in the long run (Johnston-Robledo and Barnack 2006:359). Moreover, via a social worlds trajectory, women are passing this misinformation along to others, who might heed these words and suffer unnecessarily as a result. The “myth(s)” that subject 39 referred to regarding menstruation, contraceptives, and the female body in general, appear to be as alive and as influential as ever. As demonstrated in the passages above, many women who might benefit from menstrual suppression have no idea what it is and are thus not giving it a fair chance. As Sulak says, “Women are not stupid. If you will sit down and explain stuff to them, they get it. But it is a matter of explaining it to them. And if you’re not going to sit down and take the time to explain it to them, then obviously if they’re confused, they don’t want to do it.” Women should have accurate information about the practice before they and their physician make whatever decision they feel is best.

Changing Medicine, One Field at a Time

Although many of the physicians that my subjects expressed frustration with in the above passages were women, which I gleaned from their use of gender-specific pronouns, several of my informants who are female gynecologists believe that the introduction of more female doctors into the medical specialty will bring positive changes to the gynecologist-patient relationship. Subject 27, a young female gynecologist, surmises the transformation that is occurring, “[There was a] very sudden shift between [what was] a very male dominated field to [what is] a woman dominated field. And it was a rapid shift. It went from majority male to—just overnight—a majority of females.” She believes that the increase in family-friendly professional organizations and work weeks (which are down from 80 hours a week to 60 for residents) are making the choice to specialize in gynecology easier for medical students—particularly those who want to have a more balanced lifestyle. As a result, there is an abundance of young women in the field who previously would have opted to specialize in areas that traditionally have been somewhat less demanding timewise, such as family practice.

According to Sulak, the rapid shift in gynecologists’ sex will soon change the way that continuous contraception is promoted and understood. Many of these gynecologists are weighing their reproductive options, just like their patients. Subject 27 tells me, “A good portion of gynecologists and gynecology residents, we do it (menstrual suppression), too.” Likewise, Sulak states:

New doctors, who come from small families, are being trained that menstruation is not needed... All of our ... young physicians [at Scott & White]—unless they’re trying to get pregnant—they’re all on some form of birth control where they’re not having periods every month. They do not want to be messing with this, and they

understand what the purpose of having a period every month is. So our younger physicians are being trained [to support continuous contraception].

She continues, explaining how the increase of female gynecologists will not only benefit the practice of menstrual suppression, but how it will result in women's increased confidence in their gynecological (and oftentimes obstetrical) health.

I think it'll be easier for them to explain it (continuous contraception). It's really easy for a female doctor to say "Hey, I'm doing this." And the patient will go, "Well, if you're doing it, I want to do it." It's just like a lot of patients ask me—I'm menopausal now—"Are you on hormone therapy?" And if I go, "Yeah, I'm on hormone therapy, I feel better on it, [and] to me the benefits outweigh any rare risks." They're like "Okay, good for you." ...They actually trust what we do. And that's why a lot of times women will want to see a female physician. Because they feel like ... the female physician might be able to personally relate to some of [their] problems and issues.

Although my subjects were having problems with female doctors, I suspect that age is perhaps as important as is sex to being able to feel open and assertive with one's gynecologist. Thus the introduction of gynecologists that are both young and female should improve the relationship between my subjects' generation and their women's health specialists. Women will be able to receive more accurate information about menstrual suppression, which will increasingly come from experts who practice it themselves. For example, subject 27, who, again, has just begun practicing says, "...[I]f someone's uncertain, then I can [say]... 'These are the risks, these are the benefits.' And then go down to, 'If you're really unsure, this is what I've tried. This is what people I know have tried. And this is what I like.'" She can relate to her patients as a peer as well as a physician.

The changes that are occurring in gynecology may or may not ultimately affect the physician-patient relationship—and gender relations—at large. On the one hand, in the near future, both women and men, but the former especially, will likely continue to receive the short end of the unequal distribution of power that characterizes the relationship. Consequently, my subjects' and their peers' knowledge of their bodies—and their (reproductive) health, as a result—may continue to suffer unnecessarily. On the other hand, the changes that are occurring in gynecology have been precipitated by others; they are not occurring in a vacuum. Women are demanding that antiquated ideas about medical practice and about womanhood change. In order to enact change, female medical residents are entering and modernizing fields that were previously unwelcoming. Moreover, patients are increasingly seeking doctors who are female and/or most capable of understanding their individual needs. Through these women's choices, we can see how women are beginning to assume control over their health, and that of other women, as never before. Most significantly, in the process of becoming more proactive about their bodies, women will begin to renegotiate other relationships—such as the male to female relationship.

Women and Men

This section will discuss how menstruation and hormonal contraception figure within women's relationships with men, including their male co-workers, significant others, family members, friends, and acquaintances. Menstruation and hormonal contraception are great provocateurs of gender bias; men's attitudes towards women can easily be discerned through their handling of these regimens. In this section, I will

explore how the topics of menstruation and hormonal contraception illuminate my subjects' closeness (or lack thereof) with the men in their lives. The women's experiences are quite disparate; however, there are a few certainties. First, many men act repulsed by women's reproductive-related functioning, while others choose to remain oblivious—even when their own lives may be affected by women's decisions regarding this aspect of their health. Of course, some men are supportive and willing to help the women in their lives in any capacity, which brings me to the second commonality that I discerned in my interviews—that many women refuse to involve them and play a fundamental role in perpetuating the biases against themselves.

The first half of this section will focus on menstruation. First, I will show how men and menstruation fail to mix. In order to offer a fair picture, I will then share how some men have handled so-called women's troubles in an appropriate manner. Subsequently, I will provide a few of my informants' passages about fathers and menstruation, which show how many women are as guilty as are men in creating or perpetuating this chasm between men and menstruation. The second half of this subsection centers on hormonal contraception and men's general indifference toward it. First, I will discuss their lack of involvement and perhaps inclusion in their significant other's decisions about hormonal contraception. Then, I will show how men's disinterest in this subject almost always results in women's total financial responsibility over hormonal contraception. Finally, I will hypothesize about how the use of continuous contraceptives might actually perpetuate the idea that hormonal contraception is solely a woman's concern.

Before proceeding, I must mention that I only interviewed females, with the exception of Thomas Kuehl, who spoke with me as a women's health expert. Therefore, my data on gender relations is highly biased. Nevertheless, this bias is valuable; it tells us as much about women's attitudes towards men as it does about men's towards women. In the future, I would like to interview men and ask them many of the same questions that I asked women. Because I was initially unsure that I would be able to find enough young women to interview (which turned out to be no problem at all), I considered interviewing both sexes. Several young men voluntarily expressed an interest in participating in the interviews. Moreover, several hundred men participated in the optional survey that I conducted at two Houston universities and one Atlanta-area college, and none of them asked me why I sought their opinions. One woman did, however, question why I was distributing surveys to men. After stating that I thought that men's views of hormonal contraception were extremely important, a young man sitting nearby said, "I think so, too. Thank you!" Perhaps men are more open to thinking about these topics than commonly assumed—or perhaps the classroom encourages an open-mindedness that is less readily available elsewhere.

Regardless of both my positive and at least seemingly positive experiences with male participants, it is not my objective to portray men as open-minded or closed-minded when it comes to menstruation and hormonal contraception. The goal of this subsection is to show that many women believe that there is a chasm between the sexes, which is based largely upon their disparate experiences with certain taboo topics. Unfortunately, this chasm can cause/reinforce gender disparities, and it can be the root of suboptimal relationships between women and men.

Men and Menstruation

The following quotes by my young female subjects reveal the unfavorable attitudes of the men in their lives towards menstruation and its side effects. Although these accounts may have been exaggerated for effect, they nonetheless expose a common problem in our society—a reluctance to treat women’s health, and women themselves by extension, with the objectivity (Fausto-Sterling 1985) and maturity that is warranted.

A lot of guys—they’ll watch people explode from the inside out and watch blood and guts go flying everywhere on the movie screen. But you say you’re bleeding from your vagina, and they don’t want to hear it. [S31]

When Hillary Clinton was running for president, people were like, “Oh, well she’s going to get PMS-y or menopausal, and then she’s just going to nuke somebody.” [S34]

I’ve heard guys say... “Just go put a tampon in it!”... I think guys kind of use that to their advantage to talk down to women. [S30]

I do get like the stereotypical comments [from guys], like “Oh, you’re having your period. Go away; come back in a few days...” [S28]

If I didn’t have my monthly emotional weeks, maybe I’d be treated differently [by men]. [S25]

It’s just an experience that a man cannot comprehend. Like he can’t comprehend that there’s stuff coming out of your body. And just having to deal with it. Having to buy tampons and just being emotional sometimes. [S20]

We (my roommate and I) were talking about our periods, and her boyfriend was there. And he was like, “I don’t want to hear this... I’m getting uninterested... It’s not that bad...” [S13]

I just feel like whenever I have a boyfriend, they just are completely unaware that anyone other than their girlfriend ever gets their period. [S50]

I think he (my boyfriend) thinks that I might be crazy when I'm having a period. [S1]

I am positive that if I had actually solicited comments on my subjects' negative experiences with men and menstruation, I would have a much longer list of quotes that I could share to show men's biases towards/disinterest in menstruation. Nevertheless, the point is clear—that many men are exacerbating the problem that is menstruation. Interestingly, the second quote was one of two mentioning how male acquaintances have cited menstrual symptoms as a reason for not electing a woman President or Vice President of the United States. It is amazing to think about how many men across the country probably relied on such ancient biases in an attempt to disempower even the most powerful of women during the 2008 elections.

Of course, a few of my subjects have revealed that the men in their lives have reacted favorably when confronted with issues related to menstruation. The male friends, the significant other, and the coworkers described in the following passages might not have always understood menstruation, but they have expressed interest in learning more about the symptoms, easing the experience, or treating it as a normal occurrence, respectively.

I've actually had some really good conversations recently with guys I know, talking about it (menstruation). ... They're not grossed out. Most of them are just kind of confused and see it as this mysterious thing that happens. They don't understand how it affects women sometimes, and they think that it might be just women making things up to try to exaggerate their feelings... I'm not really sure how I get there (on the topic of menstruation), but they're always

interested to know [for instance], “What is PMS? Does it really affect you? Do you have to eat chocolate?” [S48]

My husband’s so sweet right now [while I’m menstruating]. You know last week he was like, “Oh honey, what’s wrong? Here lay in bed. Here, let me do this. Let me do that...” [S28]

I’d be the only one using the bathroom that was a woman [at the engineering facility]. So you’ve got to go in the men’s room... When I’m on my period, I’ve got to keep the tampons in my pocket because you can’t carry a purse around a plant facility. It didn’t matter. Nobody ever cared or noticed. To me, I don’t think it matters. I think it’s something so easily dealt with it doesn’t matter. [S33]

Like subject 28’s husband, some men, particularly fathers it seems, want to help with the emotional and/or physical discomfort that might accompany menstruation—but these men are seldom afforded the opportunity, as demonstrated in the first two passages shared below. Those fathers who are approached by their daughters might be happy or at least inclined to help, like the dad in the third passage. The second passage was already shared in Chapter One’s section on menstruation and feelings of embarrassment, but it is so revealing that it is worth re-reading here, in another context.

It [menarche] happened on a day when my mom was at work... Luckily I think my sister was home from college. So I didn’t have to go get my dad to help me. [S33]

When I got my [first] period, it was so traumatic... My dad is like, “Oh, let’s take a walk.” And he’s talking about me getting my period. And I started crying. I was like, “Don’t do it dad. Don’t do it! Don’t tell me anything about my period.” ...At that moment, I realized that I was different from my dad. That was just like a moment in which I was like no, I’m totally different from my dad. I cannot talk to him about this. We were really close, and we’re really close now, of course. But at that moment, I was like I cannot tell him about this. It’s doesn’t feel right. [S16]

I was raised by my father. And that poor man... I’m the oldest... There’s another daughter behind me... By the time I was 18 and she

was 16, all we had to tell our dad was, “Well, we need tampons.” And he’d go, “Tampax Pearl 20-count plastic not cardboard?” And that was my order. And then he’d recite my sister’s order. “Kotex regular-sized la la la la la?” And for my father, I think it was absolutely terrifying because mothers are generally supposed to take care of that kind of thing. [S31]

Although the father described in the last passage supposedly found it “terrifying” to be his daughters’ go-to parent for help with menstruation, he was able to offer his daughters at least some of the support that they needed, and he perhaps even strengthened his relationship with them in the process. Unprompted, many of my interviewees mentioned the role that their mothers played when discussing menarche and the early years of managing menstruation. Although little research has been conducted on the subject, according to Stoltzman (1986) and Beausang and Razor (2000), mothers have been found to be young women’s primary source of information on menstruation. Only subject 31, whose mother was not around, mentioned her father’s active involvement. Others, like subjects 33 and 16, were unwilling to give their fathers a chance and therefore played a substantial role in making menstruation a taboo topic between the sexes in their home. Because my informants’ male significant others and friends were probably seldom exposed to this subject matter growing up, they are likely to seem uncomfortable or even crude when the topic finally arises (among other reasons).

Men and Hormonal Contraception

Unfortunately, women and men’s frequent inability to discuss their reproductive health with one another can often result in a scarcity of conversations about birth control, particularly when the method of choice is or could potentially be hormonal contraception.

In what could epitomize a conventional exchange between male and female partners, the interviewee below shares how apathetic her boyfriend has acted toward hormonal contraception, in general, and of greater concern, how he has acted toward his partner's use of it.

...[H]e was watching Hulu and there was a NuvaRing commercial on..., and he thought it was so funny. And I was like, "You know, I'm on NuvaRing." He was like, "I know you're on NuvaRing (jeeringly)." He just had no awareness of what it was and doesn't really care. [S50]

While I agree that the NuvaRing commercials, especially those featuring 1920s era synchronized swimmers singing the days of the week, are at least a touch silly (yet unforgettable and thus at least somewhat effective), I do think that men should know, at the very least, what form of contraception he and his partner are using, no matter how long they have been together. Another interviewee's husband demonstrated maturity toward the topic of hormonal contraception yet was still uninvolved in the decision making. Subject 14 explains, "My husband ...didn't have a huge influence on that (birth control choice). I think he was very supportive of whatever I wanted to do." Very few of the women I interviewed seemed to feel that their male partners have played an active role in this decision. Not to be misunderstood, as long as hormonal contraception is designed to alter women's bodies, I believe that these pharmaceuticals' use should ultimately be a woman's decision. Nevertheless, I have seen how men's lack of involvement in the decision-making is highly correlated with a lack of responsibility for pregnancy prevention and for various consequences of sex.

I suspect that there are men who are educated about and interested in hormonal contraception (who are not health care professionals or academics), however, the data from my interviews did not support this opinion in the least. Only one woman, in one instance, in all of my interviews, ever used a plural personal pronoun to describe who was using/benefiting from her use of hormonal contraception. I have emphasized this exceptional use of “we” in the following lines that subject 23 shares: “I thought that maybe because the ring (NuvaRing) is more local to the location where it’s supposed to be active, that it wouldn’t get to my head as much... That was the reason *we* tried it.” After rereading the transcription of this interview, it remains unclear as to whether or not this “we” refers to the woman and her partner, doctor, mother, or whomever. Even assuming it was her partner, it is still exceedingly rare to hear the use of hormonal contraception referred to as joint endeavor. My interviews contained one other mention of a man’s interest/involvement in his partner’s hormonal contraceptive routine, but it was a second person, and is now a third person account. A friend of subject 33’s, “used to check on his girlfriend every day to make sure she was taking her pill—and would go and look and check because she was so forgetful and so airheaded.” Although his girlfriend has not been portrayed in a complimentary light, this man was at least cognizant of and actively engaged in he and his girlfriend’s birth control routine, which again, seems to be exceptional. In future studies and conversations on this subject, I would like to prompt questions about men’s knowledge of hormonal contraception—regarding their female partners’ specific practices and their interest in the subject in general.

If most of the significant others of my subjects are any indication, then men seem unconcerned with hormonal birth control—until their partners need emergency contraception. Then, the administration of hormonal contraceptives most definitely becomes a “we” situation. In an interview with a university wellness center director, subject 14, I asked if male students ever made appointments to discuss birth control. She said that she mostly sees women but has discussed birth control with a few men, namely those seeking Plan B, or what is commonly referred to as “the morning after pill.” Interestingly, subject 24 never shared the cost of regular hormonal contraception with a college boyfriend; however, he paid in full for Plan B. It seems that men are much more likely to become involved in the purchase/administration of hormonal contraception when Plan A, which entails remaining uninvolved, no longer appears to be 100% effective.

I did not solicit my interviewee’s experiences with Plan B, but I did ask them to tell me if they had ever had a significant other pay or offer to pay, in part or in full, for what I suppose would be classified as “non-emergency” hormonal contraception. I asked this question not only to satisfy a personal curiosity, but because the answers could reveal how my generation regards women with respect to their reproductive responsibility. Of course, many men pay for condoms. Nevertheless, condoms cost less and have zero impact on the user’s biochemistry. The investment is minimal compared to what hormonal contraceptive users undergo near-continuously or continuously. Women, it seems, are assuming more than their share of the burden, especially when in more long-term relationships (which are often reliant upon hormonal contraception)—relationships that are more likely to be culturally sanctioned, conjugal, and thus idealized and

promoted. In sum, the data from my interviews indicates that reproduction is still largely espoused as a woman's concern rather than a couple's.

Only a few of my subjects' significant others broke what seems to be a rule—that women are financially responsible for hormonal contraception—and I will start with them.

During my undergrad...he (my boyfriend) would pay half of it because I was so poor, and we were so poor. [S16]

It was my first real boyfriend and all that. And we shared the cost of the pill... It just made sense because they were expensive... Usually he would go with me and buy them. If I had to go to the doctor, he would go with me... [It] is funny because I never offer to buy condoms now. [S22]

Interestingly, both of these subjects' boyfriends' paid when they were much younger; subsequent significant others have not paid for hormonal contraception. Moreover, neither of these informants is American; both are international students from South America. Only one of my American subjects has said that her boyfriends have offered to share the cost.

I've had boyfriends say that they would pay for half of it. But it just sort of seems unsexy and un-mysterious to me so I never sort of hold them up on it. [S50]

Although boyfriends have offered to help, she has refused compensation. This speaker reminds me of the subjects who refused their fathers' help with menstruation and further underscores my argument that women are in part to blame for the perpetuation of social inequities. Here men are offering to help, but because of a fear of embarrassment, rather than perhaps a desire to be self-reliant, the subject refuses. Subject 50 was the only

informant to say that discussing contraception with her partners made her feel like she was not being spontaneous, carefree, and casual—or the woman that young women commonly think men want them to be. I have a suspicion that the following interviewees feel similarly to subject 50, even though they perhaps would not recognize it.

It's never crossed my mind to ask my boyfriend, "Hey, will you pay for half of my birth control?" [S35]

I would love to do that (ask a significant other to play half) because it is expensive. I've never done that... [It] sucks because it costs a lot [and because] it messes with my head. I guess to do that depends on how committed the relationship is. I mean I guess it depends on how sexually active you are and what your sexual lifestyle is... I buy both [hormonal contraceptives and condoms]. That sucks. I've got to do something about that. [S23]

I've never heard of that (a man sharing the cost of hormonal contraception). [S46]

A guy has nothing to do with [it]... I don't know if that's because while I've been on the pill, there's never been a guy that I was close enough with or been with long enough to even have that conversation with. "Oh do you want to pay for [pills]?" But also I have insurance... [So I am not going to] ask... for five dollars every few months. [S38]

If it's strictly for birth control and you're in one relationship with one person, I think it would be beneficial for them to pay half. It's a lot cheaper than a kid. [S40]

Most of the women above have never shared the cost of hormonal contraception with their partner(s) because they have not felt close enough to them and/or because they have found the topic embarrassing. Either way, it has to do with a lack of intimacy between couples—and women and men in general.

The following women have not split the cost of hormonal contraception, in part, because they feel that these pharmaceuticals are medicine and not just birth control.

They tell me:

Now that I'm on birth control, it's for my health purposes (treating polycystic ovarian syndrome). It's kind of different. I wouldn't dare to ask... "Hey can you pay half of it?" [S16]

It's (hormonal contraception) been my sole responsibility. I've always thought it was my responsibility. [It's] my cycle... I use it (hormonal contraception) for both [pregnancy prevention and menstrual regulation]. [S35]

These women raise a point that is very interesting, especially considering how dramatically the medicalization of menstruation and birth control is increasing, as discussed throughout Chapter Two. Because doctors are prescribing hormonal contraception in order to treat/prevent a range of health conditions, from A to Z (amenorrhea to zits), birth control is often an ancillary benefit of what might increasingly be called "preventative medicine," "hormonal therapy," or even "menstrual therapy"—which has seemingly little to do with men. Since they do not menstruate, why, both women and men would likely ask, would they help pay for menstrual therapy?

Users of continuous contraception might further advance the notion that hormonal contraception is solely a woman's responsibility. Because these hormonal contraceptives are marketed primarily for their unique menses-inhibiting design, rather than their ability to prevent pregnancy (see Chapter Four for more on advertisements for continuous contraception), women might be increasingly hesitant to ask men to help pay for these up-and-coming products. As previously discussed, it is the less medicalized forms, or the barrier devices (especially those fitted to the male body), that are more likely to entail

shared responsibility and that are more likely to inspire a dialogue between partners. The more medicalized the birth control method, or the greater its impact on the body's biochemistry, the more likely it is a woman's sole responsibility. And as hormonal contraception becomes even more medicalized, or continuous, women may be even less inclined to discuss these "medications" with their partners. With not only menstruation but medication (one's personal use of it) being such taboo topics in American society, I think that continuous contraception, which provokes discusses of both, might serve to encumber men's involvement in a couple's contraception plan. It gives men a reason to not pay and a women an excuse to not ask.

Because medicalization is the wave of the future and because hormonal methods are here to stay, it would take a dramatic turn of events for men to become more involved in contraception—they might have to become the users of hormonal regimens themselves. A discussion of the male pill ensued a little over a third of the way through the interviewing phase. I asked a university health center physician, subject 18, whether or not a male contraceptive pill, or other hormone delivering device, would ever become popular. She would not go on the record but essentially said that it would take hundreds of years of social evolution considering the fact that men rarely share in the responsibility of paying for hormonal contraception. It was this statement of hers, in fact, that inspired my entire query about men's financial contribution. Because the male pill is not ready, and because society is not ready for it to be ready (Oudshoorn 2003), as demonstrated by both my subjects and their male partners, it seems that this chasm, or lack of intimacy, between women and men at large will persist in the near future. For the time being, reproduction will continue to appear to be a woman's concern more so than that of a man.

Hopefully, all of the media attention that the debate over continuous contraception has garnered will reach both sexes and yield a dialogue. If so, then these pills will help make women's health issues more visible. Once men start taking women's health more seriously, they will start taking women more seriously. Just as important as is the male/female relationship is the female/female relationship, which is more egalitarian in some ways—but not in all.

Women and Women

Just like many of the men described above, many women who do not use hormonal contraception find it to be unfamiliar territory in which they would prefer not to travel. The following subject describes what it was like to be intimate with a woman who was using the NuvaRing. While she understands why her girlfriend uses it—in order to regulate her symptoms rather than to prevent pregnancy—its presence still makes this interviewee feel uncomfortable.

I have been with a girl who was on birth control to regulate her period. It was kind of strange because she was using the ring, so it was really weird. It was because she had dated a guy, but she mostly used it because she had bad period symptoms as far as severe cramps, things like that... I thought it was kind of weird... It wouldn't have weirded me out as much if she was just taking regular birth control instead of the ring. There was something about [it], just like it was there. That was weird for me. I don't know if it would be as weird for a guy or not. [S20]

This third section will discuss how menstruation and hormonal contraception figure within women's relationships with other women. Aside from this initial passage, which shows how hormonal contraception can be off-putting to its user's partner

regardless of their sex, the female relationships explored here will be of the nonromantic and nonsexual variety. First, I will investigate how discussions of menstruation/pill periods and birth control can help women forge important bonds. Women can not only provide each other with physical relief (e.g. by lending Midol or a tampon) but they can offer each other advice and emotional support, which quotes from my subjects' will illustrate. After this exploration, I will discuss instances in which women have failed to show support for one another—several of this subsections' passages reveal how women's negative biases towards one another are instantiated through their attitudes towards menstruation and hormonal contraception. Many of my informants who do not use pain relievers or traditional hormonal contraceptives for symptom prevention pass judgment on women who do¹. Even more of these women disparage users of continuous contraception, although each of these informants has made concessions for women whose menstrual symptoms are most extreme. On the whole, I will show how menstruation and the use of hormonal contraception are meaningful social experiences that serve to both augment and enervate bonds between women, as well as constructions of womanhood. In the end, this section will explore how the popularization of continuous contraception could change women's relationships with other women indefinitely.

Female Bonding

Women frequently rally over women-only experiences. There are several of these events in the reproductive life of a woman: ovulation, menstruation, pregnancy,

¹ Many of the subjects were critical of the overmedication of society at large. Nevertheless, I noticed that, on the whole, these interviewees were particularly incensed by their female peers' use of pharmaceuticals to treat menstrual symptoms.

breastfeeding, and menopause—to name the major ones. These occurrences are best understood by women and are most commonly discussed among women. As a result, woman to woman bonding often occurs when women are engaged in these activities, planning for them, lamenting them, celebrating them, etc. Significantly, ovulation and menstruation are generally the only experiences listed above that occur hundreds of times over a period of decades. For these reasons and because the ovulatory phase of the cycle is often hidden and asymptomatic, menstruation it is arguably the most familiar and most frequently discussed biological event in the life of a woman that happens exclusively to women. Although she and her friends are probably extreme in their commitment to the discussion of menstruation, subject 17 illustrates how prominent the topic can be within women's circles. She says, “Wow, something like twenty percent of the conversation[s] with my girlfriends are about period cravings, period weight gain, [and] period irritability.”

As mentioned in the previous section, it can be unfortunate that women and men rarely discuss menstruation; however, women's-only affairs do yield affinity and support—or some level of rapport and friendship that can bring positive emotional, social, and physiological benefits. The following interviewees provide illustration. Whether beginning menstruation or years past menopause, whether among strangers or among best friends, women have bonded with each other repeatedly over menstruation and its symptoms. Again and again, my subjects have said how women are pleased to offer each other assistance when it is that time of the month, commonly by supplying tampons but sometimes by even “picking up the slack” at work. Here are a few examples.

You know when you are in a women's bathroom, and someone's like, "Does someone have a tampon?" And they're like, "Oh, thank you so much!" You could stand there and ask anyone that comes in pretty much... [S21]

If you're in the workplace or with your friends, you're like, "Oh no, I started my period! Do you have a tampon?" It's like I'm saving [the woman] almost. It's kind of like you're helping each other out. [S20]

We always help each other out if... somebody needs an extra tampon, [or]something like that. So there's always that kind of woman community. [S23]

If I'm having troubles about it... most of the women I work with are incredibly understanding. So they'll kind of help me pick up the slack. [S49]

Women bond over their cycles on multiple levels, even subconsciously, at the pheromonal level, as the following subjects describe with great enthusiasm. Whenever the topic of menstrual synchrony spontaneously surfaced during the interviews, my subjects were extremely eager to discuss it and its potential implications.

Oh my God! I am like alpha-vagina! [My college roommates] synched up with me. They said that their flow[s] became heavier, and that they became more regular... [S20]

It's very strange but a lot of my friends and I—we used to start around the same time because we'd hang out together. We would start around the same time, so we'd always complain together. One of us would be moody, and we're like, "Are you PMSing?" "I'm PMSing!" "Oh my God!" And then we'd be like, "I started today." "Oh I started yesterday!" It was kind of weird. We'd suffer through [it] together. [S34]

Notably, women do not have to be on the same cycle to bond over menstruation—as mentioned in the previous paragraph, women of all ages, at various

stages of their reproductive lives, often connect over their shared experiences. This is true especially when they are related. As discussed in the section exploring women and men's relationships, women often consult their mothers (and other female relatives, too), before they will turn to their fathers for support regarding menstruation (as well as birth control). As a result, they neglect to strengthen the father-daughter bond, and they augment that which exists between female kin. Frequently, my subjects mentioned how their cycles were like their mothers' or how their mothers were influential in their initial decision making about hormonal contraception. Below are some extreme examples of how female family members have offered a hand with hormonal contraception—sometimes literally.

I didn't go to the doctor [for Depo-Provera injections] because my grandmother's a nurse. So I would just pick it up, and she would give it to me. [S40]

When I was 16, my mother and I were on the same pill. So if I ran out, I could go and get her spare pack and vice versa. [S32]

I suspect that being involved in each other's experiences with hormonal contraception has contributed to the physical and personal intimacy that exists between these women, strengthening what must have already been close bonds. Unfortunately, not all women are as supportive of each other. The medicalization of menstruation and hormonal contraception affords some women the opportunity to critique other women's medical choices.

Negative Biases

Although a Mexican [S45] and a Mexican-American [S43] subject described how feelings of shame either kept them or a relative from approaching their mothers about menarche, almost all of my subjects felt that their mothers would be completely supportive about menstruation—hormonal contraception, however, was sometimes treated differently. Subject four tells me that her mom would not let her use the pill for PMS, cramps, and irregularity. When her dermatologist suggested she use it to clear her acne, however, the mother consented. Here we see our first of many instances in which a woman determines that another woman needs to just accept her menstrual problems and deal with them the old-fashioned way—by not dealing with them. Here, monthly menstruation and menstrual discomfort are, once again, reckoned as some kind of female destiny. Once the dermatologist recast the problem so that it could no longer be considered an issue of willpower, the mother deemed the pill okay and gave her daughter permission to use it. In another example, subject 13 and her mother criticize their younger sister/daughter for wanting to use hormonal contraception in order to ease her debilitating cramps. The father, in this most interesting case, has been most supportive; it is the women that are not offering the empathy that is requested.

My sister is 18, and she has [had] a lot of problems ever since she started hers (menstruation). And so it's like a real big debate between my mom and dad if they should get her on medicine. I don't think she should be on medicine. I mean it's what's supposed to happen. Just take your Advil.... I haven't ever experienced it (bad cramping), but my dad wants her to get on it because he's like, "If there's something that can stop and not let her have pain, why don't we just do that?" My mom's like, "Oh, but it's like the pill. That'll just give her an excuse to go out and sex with everyone." And she's not 13; she's 18. She can sign up for it on her own. So

she's thought about doing it on her own. She asked me about that, and I was like, "Don't do that. That's bad!" ... I see her in pain, but I've told her... "You should *just deal with it*." [S13, emphasis mine]

Here we see how women still judge each other for wanting to use the pill, even when it is being sought exclusively for its remedial effects. A few other informants who have not experienced uncomfortable menstrual symptoms have offered advice to other, less fortunate women.

I think it's kind of a wimp move [to take off school or work during menstruation], and I always try to just fight it out... [S48]

...[S]uck it up. [S16]

I try to suck it up. ...[M]y personal opinion is kind of like, "Well rub some dirt in it." [S11]

"Just deal with it," "Fight it out," "suck it up," and "rub some dirt in it," are not uncommon recommendations² that women offer to others who are menstruating. Because there are so many different types of menstrual symptoms, co-occurring haphazardly, at various times of the month, at a range of intensities depending on the day, the time, and the individual person, many women and men who do not experience debilitating symptoms seem to believe that there is an unknown factor shaping it all—willpower. A number of my subjects seem to believe, at least in some measure, that women who complain of menstrual symptoms that they do not themselves experience, such as PMS, are either embellishing these conditions or manifesting them psychosomatically. It is largely for this reason, I think, that menstruation is a taboo topic—it reveals a woman's so-called "weakness." Subject 13 introduced the word

² Most of these women recognize the need for intervention in some cases, but they must be extreme.

“weakness” to me, as used in the context of menstrual debilitation. She referred to women who miss activities or “overmedicate” as “weak” six times during our interview, which is what initially impelled me to consider women’s own role in perpetuating negative biases against menstruating women. Menstrual taboos, it seems, are not just about blood and orifices. One of the primary stigmas concerns “the woman in the body”—to borrow a phrase from Emily Martin (1999). Menstrual stigmas are not just related to the physical integrity of the body; they concern personal integrity, or again, willpower. Because the decision to take off work or school and/or use medications at least seems to involve personal integrity, women judge each other’s choices related to menstruation and hormonal contraception. Accordingly, menstrual suppression might be deemed the ultimate “cop-out.” Not only are the symptoms of menstruation reduced or even eliminated, but the entire cycle is suspended. Arguably, one of the most universal signs of womanhood is gone, along with something that yields much empathizing and thus bonding between women.

Below are some of my subjects’ direct, negative statements regarding menstrual suppression. While most of the interviewees have said that it is ultimately up to the individual to make the right decision for herself, many have also made generalizing, judgmental statements about the ethical and moral implications of suppression.

I know some of my friends have it only four times a year... [I]t doesn’t seem right to me... I just feel like today a lot of people take it (hormonal contraception) honestly for the wrong reasons. [S30]

It just doesn’t seem right to not have your period. [S24]

One interviewee noted the relationship between weight and amenorrhea. Many women disparage other women for losing (and of course for gaining) too much weight. For some, suppression might also be considered an extreme practice that is perhaps correlated with a disturbed sense of reality. Subject ten says, “Usually the people who don’t get their periods are anorexic girls.” The following quote really gets to the heart of the matter; subject 16 directly criticizes women who suppress for having a flawed sense of self: “Why do you feel so uncomfortable by getting something that you are meant to have? So in a sense... [it is] like denying a part of who you are, or not dealing with it.” None of these quotes, or the many others that I might have chosen, explore the facts about menstrual suppression. Rather than treat it as a medical decision, most of my subjects were quick to characterize suppressors as self-indulgent in some way, or as women who looking for a shortcut in life.

It remains uncertain how the popularization of suppression will affect women’s relations; however, here are some hypotheses. On the one hand, as suppression becomes more popular, I am certain that women will continue to bond—many other incredibly significant women’s-only events will remain. Plus, women can bond while discussing contraception, just as many of my informants already do. Of course, continuous regimens do not work perfectly, and women will still have reason to swap stories about their experiences. On the other hand, the debate over menstruation is inherently divisive. While women with similar attitudes might be drawn to one another, they are prone to criticize those with divergent views. I do not know and will not conjecture as to whether or not continuous contraception serves as just another medium for dissent—that women, and people in general, will be competitive no matter what. Regardless, I think that the

topic of menstrual suppression gives us the opportunity to discuss what it means to be a woman, especially a woman among women. It incites meaningful conversations about interpersonal relations, both inter- and intra-gender relations. In the next section, we will see how attitudes towards menstruation and its suppression reflect a sense of self, or are related to an intrapersonal relationship.

Woman and Self

The final relationship that will be explored in this chapter is not interpersonal but intrapersonal, or between women and themselves, or their minds and bodies. When discussing their reasons for using or refusing continuous contraception, the majority of my subjects were surprisingly introspective and revealing of their core beliefs about themselves as women and about their places in the world. In other words, decisions regarding hormonal contraception were not just about regulating physical health; they were largely about maintaining one's sense of identity. Many of the critics of both traditional hormonal contraceptives and continuous contraceptives believed that adhering to these regimens would disrupt their so-called natural rhythms. Ultimately, their sense of femininity seemed to be at stake. Conversely, many of the women who enjoyed the benefits of menstrual regulation and most of the women who practiced menstrual suppression felt that their femininity was not tied to menstruation and continual fertility. The first part of this section will explore the former notion of femininity—how it is something tied to hormonal fluctuations and fertility, and is a part of what could be called the “mind-body monism.” The second part will investigate the latter position—that femininity exists independently of the reproductive cycle and is a function of the

mind/body dualism. In the end, this chapter will reveal why these fundamental ideological differences are so consequential to the acceptance of continuous contraception and the (de)stabilization of traditional constructions of womanhood.

Physiological Femininity

In addition to being afraid of unknown health risks, most of the interviewees who were against menstrual regulation and/or menstrual suppression believed that manipulating their cycles and suspending them, in particular, would compromise their femininity; for them, being a young woman entails having a fertile interval every month. These women believe that women have been given the “gift” (rather than the “curse”) of a “bio-psycho-spiritual feedback loop,” which the cycle maintains (Borysenko 1996). Disrupting this loop disrupts much more than menstruation. Below are a few quotes that espouse the notion that a woman’s fertility and gendered identity are inherently tied.

I think I would feel like less of a woman [if menstruation stopped]...
That’s how I know I can have babies. [S13]

[Menstruation reminds me that I am] [s]till fertile, not pregnant.
Still a woman, not a man. [S10]

I don’t want to feel like I’m so sterile. I still want to feel like a lady
who can make babies if I want. [S8]

It makes me kind of special in a way because it doesn’t happen to
guys. They are not able to hope to be able to carry a baby. It’s like
God’s way or life’s way of saying that this is special for you. [S2]

Interestingly, the last two quotes belong to women who have suppressed menstruation; subject eight was once a longtime user of Depo-Provera and is a habitual

“skipper” of the traditional version of the pill, and subject two has a hormonal IUD and is a member of Patricia Sulak’s research team. By and large, the attitudes of both of these interviewees, like those of the majority of the women with whom I spoke, did not reflect either of the two extreme positions discussed in this chapter. When it comes to understanding the relationship between femininity and fertility, their views were often moderate and frequently wavering. At certain periods in their life, they have been ready to say good riddance to menstruation and/or monthly bleeding episodes, believing that their feminine identity is minimally if at all tied to their biology. At other times, they have felt mentally or emotionally connected to their cycles, or to at least simulations of them. Even in our interviews, their opinions oscillated. When discussing the practical reasons for suppressing menstruation, subjects eight and two were in favor of the practice. When the conversation turned to gender and gendered experiences, however, they grew more introspective and less certain. To borrow a concept that was explored at length in Chapter Three, they became “nostalgic,” reminiscing their path to womanhood.

The women quoted above, who believe that their fertility and their femininity are intimately connected, appear to be challenging the Cartesian dualism. They think that their sense of self, or mind, is inherently linked with their reproductive cycles, or body—that the latter has an innate influence over the former. Many feminists have rejected such thinking and theorize that it is our culture, and our culture alone, which determines the fundamental nature of womanhood; our biology and physiological experiences are what make us female—but not what make us women. Although I agree with this position to a certain extent, I never had the sense that the subjects quoted in this subsection are suffering from a false consciousness—that their conceptualizations of their

own womanhood are mistaken. I theorize that perhaps the Cartesian dualism is not something to be deconstructed or reconstructed but should rather be seen as a working concept. It will not only tell us about a given culture's conceptualization of the mind-body or mind/body, but it may be informative regarding that of an individual, as well.

It is not just the relationship between the mind and body, but also that between the mind and the smallest components of the body, that is conceived of differently by different women—even those from the same cultures, the same peer groups, and the same families. Another interviewee whose attitudes have fluctuated over the years was a longtime Seasonale user. She demonstrates how just how deep the mind exists within the body and tells me:

By the time I was ready to quit the pill I felt a little bit androgynous... I didn't want to have sex. And I thought this isn't normal; this isn't healthy. And there could have been other things contributing to that. I was newly married and going through some transitions there... It could have been more in my head than the pill causing that. But I don't regret going off of it. I did see a change after that happened... I'm also at that age now where we're thinking about starting a family. So that's actually the other reason. I felt androgynous on the pill. [S14]

Not only did this woman feel less feminine because her fertility was suspended, but she also considered herself to be somewhat “androgynous” because her libido was unusually low. To cure her feelings of androgyny, she felt that she needed to stop the pill. For her, femininity was a characteristic of the self that, at least at this point in her life, seemed to be rooted at the level of endogenous hormones and pheromones, supporting Nikolas Rose's (2007) theory that identity is increasingly being assigned to the molecular level. Again, the mind-body dualism appears to be more of a monism for

this subject—at least when she is wanting to be in her “natural,” unmedicated mode. With the introduction of the pharmaceuticals, i.e. the pill, her mind-body eventually separated, and the two lost their rhythm, literally, when her cycle stopped. It was this disconnect, or the introduction of the mind/body dualism itself, that was causing her suffering. Her body was now partially composed of exogenously-produced substances that were just body, not self or mind.

The disconnect that women describe, regardless of whether it arises in the mind, body, or mind-body, is revealing—and here is one more highly detailed example. Before explicitly tying her femininity to her fertility, the following interviewee imagines the estrangement, or “sense of loss,” that she would feel if menstruation stopped:

If women didn't have periods, it would just be kind of a sense of loss of just kind of our identity of who we are and what we experience in life—what we go through... At this point in my life, I've had so many of them [periods]—I've had my period for almost ten years. It just seems like something that would be lost... It's part of your body, so you can get in touch more so with the physical side of yourself. Because we spend so much time harvesting our intellects and our emotions... It's a strange connection between you and your physical self... No other thing can give you that connection. And I guess part of that connection is probably its ties to the reproductive system. [S11]

As I understand what she is saying, this interviewee believes that menstruation is a raw, “organic” kind of experience—as others have articulated it. It reminds her that she is more than just a mind, and that she does not just *have* a body, she *is* a body—or a mind-body; during menstruation, her mind and her body synchronize and become one. In other words, menstruation is a holistic occurrence that gives order (but not necessarily purpose) to womanhood. Although many of the women quoted in this subsection would likely

agree with many feminists that gender is an abstraction, when it comes to themselves personally, they still feel that there is something vital and genuine about it—that it is a fundamental part of them.

Physiological Genderlessness

In this subsection, I will briefly offer passages showing that not all of my interviewees associate menstruation with a sense of femininity; many of the interviewees, particularly those who have suppressed menstruation and pill periods, have made it a point to share their conviction that the two are completely independent. Here are a couple of their statements.

I don't think it's (menstruation) such a big part [of you] that you can't let go of it... [I]t's not really that tied to me. It's not like I'm missing a part of myself. I'm not emotionally attached to it. It's more of an annoyance to me. [S5]

I have a pretty negative idea of menstruating. I don't really associate it so much with anything extremely feminine, even though obviously it is one of the many things that designates the female sex... I just don't really associate it with what makes women act like women... [S21]

Subject five is a habitual “skipper” of the traditional version of the pill and subject 21 was a longtime Depo-Provera user; both young women are of the opinion that menstruation and bleeding episodes are oftentimes unnecessary. To them, bleeding, PMS, cramps, etc., are not usually positive, life-affirming experiences and are thus most easily categorized as occurrences that ensue within episodes of non-self (rather than

heighted self, which has been described by women who revere monthly menstruation), in which the body and its machinery, i.e. the sex hormones, take control.

The attitudes toward suppression described above seem to be correlated with a view of gender that differs from that which was explored in the previous subsection. These women believe that physiological processes (e.g. the menstrual/ovarian cycle) have no bearing on it. To subjects five and 21, like many feminists, gender is a construction that exists only in the mind. While the body can be assigned a gender, it does not actually *have* a gender, at least not intrinsically (Lorber 1994). Under this rationale, the mind and the body appear to be distinct entities; one's body/molecules cannot be inherently feminine if femininity is something that outside sources ascribe.

It seems to be the case here that the women who are anti-suppression are more progressive than are those who are pro-suppression—the latter seem to be clinging to a dualism, or something associated with a modernist, structuralist mindset. My intuition, however, tells me that these women are less traditional in their rationale about sex and gender, if anything—and perhaps even less married to dualisms than the other women quoted in this section. Take the nature/culture dualism, for instance. Time after time, the women from the previous subsection, who wanted to preserve monthly menstruation, said they wanted to do so because it is “natural” and thus good. It was the women who were amenable to suppression who deconstructed the term “natural” for me, unfettering it from its almost always affirmative connotation. For them, the term “culture” was less loaded and less burdened than it was for the other women. So, on the one hand, while the suppressors may keep the mind/body dualism (at least in the case of menstruation), they are liberated from nature/culture (at least when it comes to hormonal contraception). As

subject 35 notes, “We do need these little compartments to fit ourselves into—be them right or be them wrong.” In other words, everyone has sets of categories.

Although we may not be able to escape the type of erratic, paradoxical thinking that both constructs and deconstructs dualisms, we can choose which of these pairings are most pertinent to us as individuals. As I suggested before, we need not immediately attempt to deconstruct the mind/body dualism, or any dualism, in our late modern or postmodern³ research because they exist for a purpose—to show us what we value, and what we are having trouble with. One woman articulates what it is like being a woman in a world of paradoxical thinking:

I see a lot of feminists saying... “You should be in tune with your body; let it do what it naturally does.” And then they get offended when women take these kinds of pills that stop the natural flow. But aborting a baby is equally unnatural. And it’s not to say that I’m pro-life or pro-choice or anything. It’s just [that] females have this very strange double standard about what is natural and not natural about their bodies, and what they should be in tune with and what they should control. [S31]

In other words, it is not easy being a “woman,” especially as that term—along with “female,” “girl,” “mother,” “wife,” “partner”—is being shaken-up and/or redefined. With the invention of new biotechnologies, i.e. continuous contraception, what it means to be a woman is less straightforward; the traditional markers of womanhood are losing their absoluteness. Ultimately, women must decide for themselves what being “feminine” means to them—or if they want it to mean anything. In the meantime, both sides of the debate over continuous contraception will make claims about the relationship between gender and biology in order to supplement clinical research and to justify the

³ Or “postmodern-paleolithic.” See Chapter Three for an exploration of these terms.

need for change/stabilization. Any new product has a great chance of being a success if it can maintain these dualisms. If it can maintain them while appearing to overturn them, the product will have the potential to be revolutionary.

Conclusion

Although the majority of my interviewees were quick to argue that the widespread use of continuous contraception and the subsequent suppression of menstruation and its symptoms would not affect gendered relationships and constructions of womanhood—at least, not for centuries if not millennia to come—one informant’s speculation about the future was particularly inspiring. After hearing woman after woman tell me what I was already too well aware of—that society has been subjugating women, menstruating women in particular, since the biblical days (and probably long before) and is unlikely to overhaul its attitudes any time soon—Subject 39 tells me, “I think attitudes will definitely change. If you look back—I’m not an expert—but if you look back fifty years or so, it was almost taboo to use birth control.” This interviewee is not just projecting an acceptance of continuous contraception; she believes that attitudes towards women and their health will continue to progress with unanticipated momentum. Although it might at first seem outlandish to assume that a new pharmaceutical could change gender roles, especially since the pill has proven to be a capitalist goldmine (Kissling 2006), we must remember what the pill has already done for women. By and large, it has allowed us to have careers before having families, and it has made reproduction an option instead of a destiny. Although society fought it at first (and still does here and there), hormonal contraception has been accepted—and not just to a moderate degree, but so much so that

birth control hormones have become the most popular pharmaceuticals in history (Oudshoorn 1994). Maybe not tomorrow or next year, but perhaps in another fifty, the social possibilities of the latest version of the pill will be realized on a broad scale. As women take control of their health, they may be moved to renegotiate their relationships—not just with the (medical) establishment, men, other women, and themselves—but with everything and everyone else. In fact, they must challenge others to participate in the advancement of women's health. Only then will continuous contraception be as socially ground-breaking as it could be biologically.

lkjones

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Chapter Six: The Survey

...[A]ttitudes will definitely change... [I]f you look back fifty years or so, it was almost taboo to use birth control. [S39]

This chapter details the results of the survey that I conducted, which was designed to supplement the qualitative data that I have analyzed in the previous chapters.

Provisionally titled “College-Aged¹ Women and Men’s Attitudes Towards Extended Cycle Contraceptive Regimens,” I introduced the survey in the first chapter. To briefly recapitulate, I distributed two versions of it to young women and men—mostly students at the University of Houston and Rice University. Then, Thomas Kuehl of Scott & White performed statistical analyses on the collected data, which I will share and describe here. Although the interviews provide much more insight into individuals’ attitudes towards continuous contraception, the survey is valuable because it could be accomplished with a greater number people, including men, and because it asked the informants to give decisive responses. It ultimately extends my hypotheses about the future of hormonal contraception.

Please note that for the majority of the questions, survey takers left answers blank. In the statistical analyses of the questions pertaining to contraception/menstruation/sex, percentages are based on how many took the survey itself—questions left blank were treated as if not answering was one of the answer options provided. These responses appear in the tables as “missing.” Before distributing the survey forms, I informed the participants that they could leave questions blank if they did not feel strongly about any of the answers. Thus “missing” may likely indicate an opinion of “undecided.”

¹ This approximate label encompasses college students, graduate students, and young professionals.

However, survey takers may have left answers blank because of time constraints (although almost all survey takers finished with ample time to spare) or because they simply overlooked them. Additionally, participants' answers may have been illegible to the Scantron. To overcome the survey takers' inconsistencies and any confusion that could arise over the percentages, I will discuss clear-cut majority opinions in the "Additional Analysis" section of this chapter, rather than potentially imprecise numerical findings. Moreover, the final section will not include discussions of the data collected for every question. The last question on the survey, for instance, was intended for Sulak's research and is only tangentially related to mine. Other questions have data that repeats or reconfirms that of previous questions, while a few others have ambiguous implications.

Personal Characteristics Questions

Age

Two hundred ninety-eight of 304 women provided their age. The mean age was 22 years-old, with a standard deviation of five. The median was 20, and the range was from 17 to 57. The frequency distribution of ages for the women is shown in Table 1. Meanwhile, 149 of 152 men provided their age. The mean age was 21 years-old, with a standard deviation of four. The median was 20, and the range was from 16 to 41. The frequency distribution of ages for the men is shown in Table 2.

Table 1. Frequency of Reported Ages for Female Participants					
Age group	Age	Count	Cumulative	Percent	Cumulative
Late teens	17	3	3	1.0	1.0
	18	52	55	17.1	18.1
	19	50	105	16.4	34.5
Early twenties	20	74	179	24.3	58.9
	21	36	215	11.8	70.7
	22	25	240	8.2	78.9
	23	10	250	3.3	82.2
	24	10	260	3.3	85.5
Older	25	7	267	2.3	87.8
	26	4	271	1.3	89.1
	27	6	277	2.0	91.1
	28	5	282	1.6	92.8
	29	1	283	0.3	93.1
	30	1	284	0.3	93.4
	32	4	288	1.3	94.7
	34	1	289	0.3	95.1
	38	1	290	0.3	95.4
	39	1	291	0.3	95.7
	40	1	292	0.3	96.1
	44	2	294	0.7	96.7
	50	1	295	0.3	97.0
	52	2	297	0.7	97.7
	57	1	298	0.3	98.0
	Missing	6	304	2.0	100.0

Table 2. Frequency of Reported Ages for Male Participants					
Age subgroup	Age	Count	Cumulative	Percent	Cumulative
Late teens	16	1	1	0.7	0.7
	17	1	2	0.7	1.3
	18	24	26	15.8	17.1
	19	32	58	21.1	38.2
Early twenties	20	32	90	21.1	59.2
	21	22	112	14.5	73.7
	22	11	123	7.2	80.9
	23	3	126	2.0	82.9
	24	6	132	3.9	86.8
Older subgroup	25	4	136	2.6	89.5
	26	2	138	1.3	90.8
	27	3	141	2.0	92.8
	28	1	142	0.7	93.4
	29	3	145	2.0	95.4
	30	1	146	0.7	96.1
	35	1	147	0.7	96.7
	37	1	148	0.7	97.4
	41	1	149	0.7	98.0
	Missing	3	152	2.0	100

Ethnicity

Three hundred two of 304 women reported a single specific ethnicity. The highest reported group (141/302 or 47%) selected “white.” Fourteen selected “other” as their ethnic identity, which could indicate that more than one choice applied or that they were of ethnic origins not listed as one of the five specified. The frequency distribution for the women is shown in Table 3. Similarly, 143 of 150 men reported a single specific ethnicity. The highest reported group (65/152 or 43%) selected “white.” Seven selected “other” as ethnic group which, again, could indicate that more than one choice applied or that they were of ethnic origins not listed as one of the five specified. The frequency distribution for the men is shown in Table 4. It is similar for both women and men.

Table 3. Frequency of Reported Ethnicities for Female Participants				
	Count	Cumulative	Percent	Cumulative
White	141	141	46.4	46.4
Black	39	180	12.8	59.2
Hispanic	48	228	15.8	75.0
Asian Indian	22	250	7.2	82.2
Other Asian	38	288	12.5	94.7
Other	14	302	4.6	99.3
Missing	2	304	0.7	100

Table 4. Frequency of Reported Ethnicities for Male Participants				
	Count	Cumulative	Percent	Cumulative
White	65	65	42.8	42.8
Black	12	77	7.9	50.7
Hispanic	28	105	18.4	69.1
Asian Indian	15	120	9.9	78.9
Other Asian	23	143	15.1	94.1
Other	7	150	4.6	98.7
Missing	2	152	1.3	100

Best Choice of Academic Major or Concentration

Two hundred forty-five of 304 women reported a specific first choice for major or concentration. The highest frequency was the social sciences with 108 of 304, or 35%, reporting this area of study. At the same time, 122 of 152 men reported a specific first choice for major or concentration. The highest frequency was the social sciences with 38 of 152, or 25%, reporting this area of study. The distribution of majors for women varies slightly from that of men, with fewer women in the business and engineering areas and more in the humanities and the social sciences. The natural sciences, fine or performing arts, other, and percent of missing answers are similar for both women and men.

Table 5. Frequency of Reported Majors for Female Participants				
	Count	Cumulative	Percent	Cumulative
Humanities	41	41	13.5	13.5
Business	9	50	3.0	16.4
Engineering	16	66	5.3	21.7
Social Sciences	108	174	35.5	57.2
Natural Sciences	53	227	17.4	74.7
Fine or performing arts	18	245	5.9	80.6
Other	56	301	18.4	99.0
Missing	3	304	1.0	100

Table 6. Frequency of Reported Majors for Male Participants				
	Count	Cumulative	Percent	Cumulative
Humanities	13	13	8.6	8.6
Business	11	24	7.2	15.8
Engineering	23	47	15.1	30.9
Social Sciences	38	85	25.0	55.9
Natural Sciences	27	112	17.8	73.7
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Other	29	151	19.1	99.3
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Highest Degree Completed Vs. Highest Degree Intended

Three hundred one of 304 women reported both the highest degree completed and the highest degree intended. The majority (256/301 or 85%) indicated that they had completed high school and all, except for one, intended to complete at least an undergraduate degree. Interestingly, 215 of 257, or 83.7%, of the women who indicated that they had completed high school also reported that they intended to complete an advanced degree beyond undergraduate. This proportion seems high for the “typical” undergraduate student. It is possible that they responded to this survey question as if it were a test with right and wrong answers. Similarly, 151 of 152 men reported both the highest degree completed and the highest degree intended. Again, the majority (138/151 or 91.4%) indicated that they had completed high school, and all but one intended to complete at least an undergraduate degree. Most (112/138 or 81.2%) of the men who were surveyed and indicated that they had completed high school intended to complete an advanced degree. Again, this proportion seems high for the “typical” undergraduate student. Finally, 4/151 men, or 2.6%, indicated that they currently held an advanced or specialty degree, and 9 of 151 men, or 5.9%, reported already completing their undergraduate degree.

Chapter Six: The Survey

...[A]ttitudes will definitely change... [I]f you look back fifty years or so, it was almost taboo to use birth control. [S39]

This chapter details the results of the survey that I conducted, which was designed to supplement the qualitative data that I have analyzed in the previous chapters.

Provisionally titled “College-Aged¹ Women and Men’s Attitudes Towards Extended Cycle Contraceptive Regimens,” I introduced the survey in the first chapter. To briefly recapitulate, I distributed two versions of it to young women and men—mostly students at the University of Houston and Rice University. Then, Thomas Kuehl of Scott & White performed statistical analyses on the collected data, which I will share and describe here. Although the interviews provide much more insight into individuals’ attitudes towards continuous contraception, the survey is valuable because it could be accomplished with a greater number people, including men, and because it asked the informants to give decisive responses. It ultimately extends my hypotheses about the future of hormonal contraception.

Please note that for the majority of the questions, survey takers left answers blank. In the statistical analyses of the questions pertaining to contraception/menstruation/sex, percentages are based on how many took the survey itself—questions left blank were treated as if not answering was one of the answer options provided. These responses appear in the tables as “missing.” Before distributing the survey forms, I informed the participants that they could leave questions blank if they did not feel strongly about any of the answers. Thus “missing” may likely indicate an opinion of “undecided.”

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Table 7. Comparison of Completed Degrees with Intended Degrees Reported as Percentage of Total Women							
Completed Degree	Intended Degree						
	Some high school	High school	Undergraduate degree	Master's Degree	Doctoral degree	Other specialty degree	Total
Some high school	0 (0%)	0 (0%)	0 (0%)	2 (0.7%)	0 (0%)	0 (0%)	2 (0.7%)
High school	0 (0%)	1 (0.3%)	41 (14%)	108 (36%)	92 (31%)	15 (5%)	257 (85%)
Undergraduate degree	0 (0%)	0 (0%)	2 (0.7%)	9 (3%)	17 (6%)	1 (0.3%)	29 (10%)
Master's degree	0 (0%)	0 (0%)	0 (0%)	0 (0%)	5 (2%)	0 (0%)	5 (2%)
Doctoral degree	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0.3%)	1 (0.3%)	2 (0.7%)
Other specialty degree	0 (0%)	0 (0%)	2 (0.7%)	2 (0.7%)	1 (0.3%)	1 (0.3%)	6 (2%)
Total	0 (0%)	1 (0.3%)	45 (15%)	121 (40%)	116 (39%)	18 (6%)	301 (100%)

Table 8. Comparison of Completed Degrees with Intended Degrees Reported as a Percentage of Total Men							
Completed Degree	Intended Degree						
	Some high school	High school	Undergraduate degree	Master's Degree	Doctoral degree	Other specialty degree	Total
Some high school	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
High school	0 (0%)	1 (0.7%)	25 (17%)	56 (37%)	44 (29%)	12 (8%)	138 (91%)
Undergraduate degree	0 (0%)	0 (0%)	3 (2%)	3 (2%)	3 (2%)	0 (0%)	9 (6%)
Master's degree	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0.7%)	0 (0%)	1 (0.7%)
Doctoral degree	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Other specialty degree	0 (0%)	0 (0%)	2 (1.3%)	0 (0%)	0 (0%)	1 (0.7%)	3 (2%)
Total	0 (0%)	1 (0.7%)	30 (20%)	59 (39%)	48 (32%)	13 (8.6%)	151 (100%)

Overall, the personal characteristic questions reveal that the women who completed this survey are undergraduate students in their late teens to early twenties who intend to seek advanced degrees. They have a range of academic specialties and ethnic identities. Similarly, the men who completed this survey are primarily undergraduate students in their late teens to early twenties who intend to seek advanced degrees. They also have a range of academic specialties and ethnic identities.

Contraception/Menstruation/Sex Questions

The men's version of the survey was shorter than the women's (questions regarding personal experiences with menstruation and the use of hormonal contraception were not applicable to them). Consequently, tables for men's answers will only be included for some of the remaining questions.

Question 1

“Which methods of birth control do you currently use regularly?”

Table 9. Percentage of Women Who Were Using the Following Methods of Birth Control Regularly at the Time of the Survey	
Choices ²	N and % selecting each choice
The Pill in 21/7 format	83/304 (27.3%)
Extended regimen pills that are designed to reduce the frequency of menstruation ³ (e.g. Seasonale)	12/304 (3.9%)
Extended regimen pills that are designed to completely stop menstruation	1/304 (0.3%)
The Patch (e.g. Ortho Evra)	1/304 (0.3%)
The Implant (e.g. Implanon)	1/304 (0.3%)
A Cervical Cap	0/304 (0%)
Withdrawal	27/304 (8.9%)
I am not trying to get pregnant, but I am not using a birth control method	10/304 (3.3%)
The Ring (e.g. NuvaRing)	4/304 (1.3%)
An IUD (Mirena or ParaGard)	1/304 (0.3%)
A Spermicide	79/304 (26.0%)
Abstinence	76/304 (25.0%)
Male Condoms	2/304 (0.7%)
Female Condoms	1/304 (0.3%)
Sterilization Surgery	9/304 (3.0%)
Other	6/304 (2.0%)
An Injectable (e.g. Depo-Provera)	0/304 (0%)
A Diaphragm	6/304 (2%)
Natural Family Planning/Rhythmic Method	1/304 (0.3%)
I am trying to get pregnant	68/304 (22.4%)
Selected none of the choices	8/304 (2.6%)
Selected more than one choice	72/304 (23.7%)

For this question, most (97.4%) of the participants chose at least one selection. Seventy-two, or 23.7%, chose two, three, or four selections. Perhaps some of them did not realize that they were to report their current methods of birth control only. Selecting two choices was most common, which is to be expected considering women's frequent desire to "double up," which was discussed in Chapter Three.

Most women reported that they were using spermicide along with another method. This answer is surprising, perhaps indicating that the Scantron made a reading

² Twenty-four/four hormonal contraceptive regimens should have been an option.

³ Pseudomenstruation, or pill periods, are included.

error. It is also astonishing that more than a fifth of the women reported that they are trying to get pregnant. In this case, it is likely that they misread the question. The other answers, here and throughout the survey seem to be reasonably consistent with expectations, indicating that the Scantron and survey forms were effective on the whole. Most birth control choices were selected rarely.

Significantly, only a minority of the survey takers reported the use of continuous contraception—the exact numbers are likely erroneous due to the aforementioned problems that the women experienced answering this question. It is likely that some of the women used continuous regimens in the past. Moreover, as was common among the interviewees, many of survey takers may have suppressed their cycles at random intervals by skipping their 21/8 or 24/4 pill packs' hormone free or reduced hormone intervals. Future quantitative studies on continuous contraception/menstrual suppression should treat skipping this interval as a form of suppression and prioritize discovering its frequency.

Question 2

“In general, I find/have found menstruation to be ...”

Table 10. Frequency Distribution of Female Responses Regarding Menstrual Discomfort				
	Count	Cumulative	Percent	Cumulative
Not Inconvenient or Uncomfortable	18	18	5.9	5.9
Mildly Inconvenient or Uncomfortable	161	179	53.0	58.9
Very Inconvenient or Uncomfortable	103	282	33.9	92.8
So Inconvenient or Uncomfortable that it is Debilitating	21	303	6.9	99.7
Missing	1	304	0.3	100

The majority of women (264/304 or 86.8%) reported that they were mildly or highly affected by menstruation.

Question 3

“Which of the following menstrual symptoms have you ever experienced (choose all that apply)?”

Table 11. Frequency Distribution for the Most Common Menstrual Symptoms	
Symptom	N and % Selecting Each Symptom
Pain/cramps	273/304 (89.8%)
Heavy bleeding	181/304 (59.5%)
Mood swings/irritability (PMS)	206/304 (71.1%)
Headaches before or during your period	111/304 (36.5%)
Bloating/swelling	218/304 (71.7%)
None of the above	6/304 (2.0%)

The symptoms with the highest frequencies were pain/cramps, mood swings, and bloating/swelling. Heavy bleeding was reported by more than half of the women, and headaches were reported by about one third of them.

Question 4

“The reason that I have chosen extended regimen Pills over the traditional version of the Pill is... (choose all that apply).”

This question has two tables, the first of which is for those women who reported using continuous contraception in the first question. The second reveals the answers given by women who do not use these regimens. These women answered as if they were using continuous contraception themselves, perhaps misunderstanding the question or not

reading it thoroughly. It is possible that some of them used those regimens in the past, or maybe they skip or have skipped their reduced hormone or hormone free interval.

Table 12. Frequency Distribution of Female Responses for the Various Reasons to Suppress Bleeding, as Reported by Those Currently Using Extended Regimen Pills	
Symptom	N and % selecting each symptom
Not applicable (I am not taking an extended regimen Pill)	1/13 (8%)
To avoid monthly bleeding	5/13 (38%)
To alleviate menstrual symptoms	6/13 (46%)
Because my doctor recommended them	8/13 (62%)

All 13 participants responded to this question, although one seemed to be inconsistent (she answered “not applicable”).

Table 13. Frequency Distribution of Female Responses for the Various Reasons to Suppress Bleeding, as Reported by Those <i>Not</i> Currently Using Extended Regimen Pills	
Symptom	N and % selecting each symptom
Not applicable (I am not taking an extended regimen Pill)	240/291 (82.5%)
To avoid monthly bleeding	7/291 (2.4%)
To alleviate menstrual symptoms	8/291 (2.7%)
Because my doctor recommended them	4/291 (1.4%)

There were 15 participants who selected one or more (N=3) reasons other than “not applicable,” and 36 participants did not respond to this question.

Question 5

“Evolutionary biologists and anthropologists have debated the evolutionary advantage of monthly menstruation. What do you think its purpose might be?”

Table 14. Frequency Distribution for Female Responses Regarding the Evolutionary Advantage of Menstruation				
	Count	Cumulative	Percent	Cumulative
To clean the uterus	104	104	34.2	34.2
To save the uterus from having to constantly maintain a fertile lining	79	183	26.0	60.2
It is solely a byproduct of hormonal fluctuations	60	243	19.7	79.9
None of the above	44	287	14.5	94.4
Missing	17	304	5.6	100

Table 15. Frequency Distribution for Male Responses Regarding the Evolutionary Advantage of Menstruation				
	Count	Cumulative	Percent	Cumulative
To clean the uterus	40	40	26.3	26.3
To save the uterus from having to constantly maintain a fertile lining	45	85	29.6	55.9
It is solely a byproduct of hormonal fluctuations	43	128	28.3	84.2
None of the above	22	150	14.5	98.7
Missing	2	152	1.3	100

The highest percentage of women chose “to clean the uterus,” while the highest percentage of men chose “it is solely a byproduct of hormonal fluctuations.” The same percentage of each sex selected “none of the above.” For men, responses were nearly equally divided among the three specific answers with no particular preference.

Question 6

“For a woman on the Pill, I suspect that monthly bleeding...”

Table 16. Frequency Distribution for Female Responses Regarding the Function of Pill Periods				
	Count	Cumulative	Percent	Cumulative
Has health benefits and is necessary	170	170	55.9	55.9
Only serves to reassure a woman that she is not pregnant	111	281	36.5	92.4
Missing	23	304	7.6	7.6

Table 17. Frequency Distribution for Male Responses Regarding the Function of Pill Periods				
	Count	Cumulative	Percent	Cumulative
Has health benefits and is necessary	97	97	63.8	63.8
Only serves to reassure a woman that she is not pregnant	53	150	34.9	98.7
Missing	2	152	1.3	100

Two hundred eighty-one of 304 women responded to this question, and the majority (170/281 or 60.0%) responded that monthly bleeding on the pill had health benefits and is necessary. This frequency distribution is similar to men responding to this survey question. One hundred fifty of 152 men responded to this question and the majority (97/150 or 64.7%) responded that monthly bleeding on the pill had health benefits and is necessary.

Question 8

“I think that monthly menstruation is a natural part of being a woman, and it should not be altered (True or False).”

Table 18. Frequency of Female Responses Regarding the Naturalness/Alterability of Menstruation				
	Count	Cumulative	Percent	Cumulative
False	150	150	49.3	49.3
True	129	279	42.4	91.8
Missing	25	304	8.2	100

Table 19. Frequency of Male Responses Regarding the Naturalness/Alterability of Menstruation				
	Count	Cumulative	Percent	Cumulative
False	62	62	40.8	40.8
True	85	147	55.9	96.7
Missing	5	152	3.3	100

Two hundred seventy-nine of 304 women responded to this question, and the most commonly chosen answer was “false.” At the same time, however, 147 of 152 men responded to this question, and the majority (85/147 or 57.8%) of them thought that the statement was “true.”

Question 9

“Anthropological research indicates that until recently, women only had one-third as many periods in their lifetimes as American women do today (modern women menstruate more frequently than hunter-gatherer women largely because they have fewer pregnancies and spend less time breastfeeding, which stop menstruation). Which do you think is healthiest?”

Table 20. Frequency Distribution of Female Responses Regarding Anthropological Findings				
	Count	Cumulative	Percent	Cumulative
Having around 150 lifetime periods (like hunter-gatherer women)	49	49	16.1	16.1
Having around 450 lifetime periods (like the average American woman)	43	92	14.1	30.3
Both are equally healthy	191	283	62.8	93.1
Both are equally unhealthy	7	290	2.3	95.4
Missing	14	304	4.6	100

Table 21. Frequency Distribution of Male Responses Regarding Anthropological Findings				
	Count	Cumulative	Percent	Cumulative
Having around 150 lifetime periods (like hunter-gatherer women)	33	33	21.7	21.7
Having around 450 lifetime periods (like the average American woman)	32	65	21.1	42.8
Both are equally healthy	74	139	48.7	91.4
Both are equally unhealthy	5	144	3.3	94.7
Missing	8	152	5.3	100

Two hundred ninety of 304 women responded to this question, and the majority (191/290 or 65.9%) thought that both choices were correct—that it would be equally healthy to have either 150 or 450 periods and/or bleeding episodes in a lifetime. In total, one hundred forty-four of 152 men responded, and the majority (74/144 or 51.4%) of them—like the women but to a lesser degree—thought that both choices were equally correct.

Question 10

“Do you think that it is a good idea for women to use extended regimen Pills to reduce their lifetime number of cycles?”

Table 22. Frequency Distribution for Female Responses Regarding Cycle Rate Reduction				
	Count	Cumulative	Percent	Cumulative
Yes	178	178	55.6	58.6
No	99	277	32.6	91.1
Missing	27	304	8.9	100

Table 23. Frequency Distribution for Male Responses Regarding Cycle Rate Reduction				
	Count	Cumulative	Percent	Cumulative
Yes	57	57	37.5	37.5
No	91	148	59.9	97.4
Missing	4	152	2.6	100

Two hundred seventy-seven of 304 women responded to this question, and the majority (178/277 or 64.3%) thought that it was a good idea to use continuous contraception to reduce the lifetime number of cycles. This differs significantly from the 148 out of 152 men who responded to the question, the majority (91/148 or 61.5%) of which said that it was not a good idea to use continuous contraception to reduce the lifetime number of cycles.

Notably, I may have primed the women to be responsive to suppression—in an earlier question, I inquired about their negative, rather than positive, experiences with menstruation prior to asking about their openness toward suppression. Nevertheless, as stated in the introduction, Rose et al. (2008) found that women are not easily swayed in their opinions of menstrual suppression—not even after having been deliberately primed with negative information about menstruation. Moreover, promoters of continuous contraception, whether they are medical professionals or users themselves, frequently reference the various problems associated with menstruation when advocating its use. In other words, if a woman was going to be persuaded to be open to the use of continuous contraception after my mention of the increase in menstrual frequency over the years, she would probably be open to it after experiencing menstrual suppression’s direct avocation.

Question 7

“I think that women on extended regimen pills should have at least ____ periods per year.”

Table 24. Frequency Distribution of Female Responses Regarding How Many Periods Women Should Have Per Year				
	Count	Cumulative	Percent	Cumulative
0	10	10	3.3	3.3
4	72	82	23.7	27.0
6	37	119	12.2	39.1
It makes no difference	93	212	30.6	69.7
Women should not be taking extended Pill Regimens	74	286	24.3	94.1
Missing	18	304	5.9	100

Two hundred eighty-six of 304 women responded to this question, and the majority responded that “it makes no difference” how many periods (or bleeding episodes) women on continuous regimens have. Two other frequent responses were that

“women should not be taking extended pill regimens” and that extended pill regimens should be managed so that there were at least “4” periods per year.

Question 7

“Which statement applies to you regarding vaginal intercourse?”

Table 25. Frequency Distribution for Female Responses Regarding Sexual Experience				
	Count	Cumulative	Percent	Cumulative
I have never had vaginal intercourse	113	113	37.2	37.2
I have had vaginal intercourse, but not within the last 3 months	38	151	12.5	49.7
I have had vaginal intercourse in the past 3 months	143	294	47.0	96.7
Missing	10	304	3.3	100

Table 26. Frequency Distribution for Male Responses Regarding Sexual Experience				
	Count	Cumulative	Percent	Cumulative
I have never had vaginal intercourse	56	56	36.8	36.8
I have had vaginal intercourse, but not within the last 3 months	27	83	17.8	54.6
I have had vaginal intercourse in the past 3 months	63	146	41.4	96.1
Missing	6	152	3.9	100

Two hundred ninety-four of 304 women responded to this question, and a minority (113/294 or 38.4%) indicated that they had never had vaginal intercourse. Similarly, 146 of 152 men responded, and a minority (56/146 or 38.4%) indicated that they had never had vaginal intercourse.

Additional Analysis

The tables above indicate that the use of continuous contraception is infrequent among the female survey takers, but that these women, decisively more so than their male peers, are open to the idea of stopping monthly menstruation and pill periods. The data indicating that only a minority of the women are using continuous contraception (table 9) was not unexpected based on the interviews and on the fact that most of these regimens are still new to the market. The data indicating the women's receptivity to the practice of suppression (table 22)—the majority said that they believe that it is a good idea for women to use continuous contraception to reduce their lifetime number of cycles—was not anticipated; the interviews found that most women were “moderate” or “undecided” in their attitudes toward suppression. The survey persuaded them to determine to which side they might be leaning.

Notably, almost⁴ all of the survey takers were present for my introduction, in which I briefly discussed the data from Chapter Four that compares American women's menstrual frequency with that of women with disparate reproductive careers. Although I did not want to influence the informants in any way, their professors and instructors stipulated that in order to distribute the surveys in their classes, I needed to first introduce them and their anthropological context to the students. If this information did affect the women's receptiveness to continuous contraception, it supports what Sulak is quoted as saying in the previous chapter—that the more women know about the science and history behind monthly menstruation and bleeding episodes, then the more open they will be to the newest hormonal regimens. It also supports the hypothesis that I offered in Chapter

⁴ Survey takers who were not students, or who were students but were late to class, did not have an introduction to the survey. The majority did, however.

Four, that the discourses that can raise the stakes of the debate over suppression the most (i.e. those from the biological sciences and biological anthropology in particular), will prove extremely persuasive.

As a feminist studies researcher, the data indicating that the women were decisively more open to cycle stopping than men is of great interest; the majority of the women thought it was a good idea, while the majority of the men did not. Moreover, men were more likely to say that menstruation and pill bleeding have health benefits (tables 16 and 17) and were natural (tables 18 and 19), which I probed in other questions in order to confirm the majority's attitudes. When analyzing women and men's differences of opinions, we must first consider the fact that the majority of the female survey takers are or have been "mildly affected" or "very affected" by a variety of menstrual symptoms (tables 10 and 11). Obviously, none of the men have had any personal experiences with menstruation. It makes sense then that the survey takers who had the most negative experiences with cycling would be most disposed toward its elimination, and the same was true among the interviewees.

In addition to having different exposures to menstruation, women and men's attitudes toward suppression may relate back to and provide further insight into an issue discussed in the introductory chapter—that pain and discomfort are our destiny—a destiny that seems to belong to women in particular. While it is well known that American men are more hesitant to seek medical help/intervention than women, I am not theorizing that the male survey takers' attitudes toward suppression has to do with stoicism—I doubt that they want women to discontinue the medicalization of their bodies. In general, I suspect that American men are happy that women use the hormonal

contraceptives. Instead, I think that the sexes' disparate attitudes is most related to education—as discussed in the previous chapter, men have little involvement with the use of, and thus scarce knowledge about, hormonal contraception. They seem to know even less about the purpose of menstruation (tables 14 and 15) and its manipulability than do women. Thus they think that women should experience all that is supposedly natural. Again, this finding reconfirms what Sulak said in the previous chapter, that the more one knows about the purpose of menstruation and pill periods, the more likely one will be to intervene. Of course, not every woman who is knowledgeable about continuous contraception will use it, but as Sulak hypothesizes, it is where we are generally headed.

Concluding Thoughts

We have methods of birth control that not only are excellent in preventing pregnancy, but they're also excellent modalities for decreasing menstrual problems. So continuous contraception is where we're headed. [S6, Patricia Sulak, MD]

Even after interviewing fifty informants, conducting participant observation with world-renowned experts, surveying 455 of my peers, writing a dissertation on the subject, and using the pharmaceuticals for years myself, I still find the topic of continuous contraception to be most intriguing and confounding. So many of my scholarly and personal interests—medicalization, gender relations and ideologies, cutting-edge pharmaceuticals, rites of passage, women's only issues, female bonding, dating and mating rituals, and biological anthropology—collide in this one project that required more theoretical reflection and proved far more rewarding than I had ever expected. I am confident that, like my informants, my attitude toward continuous contraception will continue to change over time and that its story is far from written.

My fieldwork has offered many avenues for future research. I have begun to explore how hormone delivering devices other than the pill, including patches, rings, IUDs, shots, and implants, are each intensifying the biomedicalization of women's health. I would like to extend this investigation in order to understand how these pharmaceuticals are evolving according to individualized preferences. Through the lens of hormonal contraception, I hope to discover the direction personalized medicine is headed in the near future. Additionally, I intend to study women's deliberate omission of the hormone free interval that is included in traditional regimens. This almost completely unstudied means of stopping the cycle (and bucking the recommendations of the

pharmaceutical industry and/or doctors) was the most common method of menstrual suppression that my diverse group of informants practiced.

I would also like to interview men to discover their views of continuous regimens, which to my knowledge has not been done formally. I seek to understand how menstrual suppression could change stereotypes about women. Moreover, I would like to explore how men's involvement with hormonal contraception, financial and otherwise, could be changing as the pill and other hormonal contraceptive devices are increasingly marketed as preventative medicine and decreasingly as birth control. The most unanticipated finding from my surveys—that most women are in favor of cycle stopping while most men are not—has immense implications that must be explored qualitatively. This research will not only uncover men's views of menstruation and birth control, but it will uncover their ostensibly more conservative ideas about medicalization and the future of womanhood. Finally, it will reveal whether or not they would use the male version of the pill, which is in development.

The work that I have conducted thus far has already made novel contributions to the social scientific study of continuous contraception and menstruation: this dissertation has considered the roles of experts and non-experts equally, it has treated the omission of the hormone-free interval that is included in traditional regimens as a form of menstrual suppression, it has quantitatively explored men's attitudes toward hormonal contraception and monthly bleeding, and it has scrutinized the designs of contraceptive hormone-delivering devices other than pills, which are quickly becoming popular. More specifically, I have analyzed the designs of these devices in terms of their ability to enhance self-identity; their selection or rejection reflects personal ideologies about the

body and its penetrability, holism, and purity. Finally, in addition to considering how menstruation is traditionally viewed as matter out of place, this dissertation has explored how in a late modern risk society, *medicine* is increasingly viewed as dirt or pollution. This perspective is becoming increasingly common as the biomedicalization of the body intensifies. Past work on contraception and menstruation has almost completely neglected these issues that are crucial towards an understanding of the recent evolution of hormonal contraception and the future of pharmaceuticals.

This dissertation has also examined how its diverse group of informants feels about a topic that has always been critical, convoluted, taboo. Discourse about it remains restricted even though it affects everyday life for millions of women, it affects the reproduction of life, and it has a life of its own—we do not know the extent to which hormonal regimens will be used in the future. Nor do we understand how they will be used, for example: some new, cure-all type regimens are including nutrients such as iron, which is included to offset the losses of imposed bleeding, and folic acid, which is popularly taken prior to and during pregnancy—not while trying to avoid conception. What we do know for certain is that these complex super drugs were not even an option until fifty years ago. Even as I was growing up in the 1980s and 1990s, society was not ready—these products were not advertised on television. Moreover, continuous regimens would not be packaged as pills until the 1990s. Today, I see a commercial for these drugs almost every time I watch TV programming that has a target audience of women belonging to the most coveted 18-49 age range. We have come a long way quickly, and by 2020, these regimens could be more popular than the traditional 21/7 regimens. If we

stay on the path that we are on with cycle regulation, monthly bleeding could easily be but a vestige of the past by the time the pill celebrates its centennial birthday.

Because birth control hormones are the most widely consumed pharmaceuticals in history (Oudshoorn 1994:9) and because hormonal contraceptives control the reproduction of life, the recent evolution of hormonal contraception is a momentous topic in and of itself. Nevertheless, it is important to remember the larger picture, that the elimination of menstruation has immense implications about society at large. Our rapid acquisition of knowledge and technology in late modernity is not just accelerating the medicalization of the hormonal contraception and menstruation, it is also intensifying the hegemony of medicine and is changing what it means to be a patient. The user of continuous contraception is just one biomedical subject whose body is now viewed as part posthuman, part stone ager, and part dirt. As I argued above, menstruation and pill periods are not the only kinds of bodily pollution that we are commonly afraid of—many of us see medicine as dirt because it is an exogenous substance that can be risky to our health in both the proximate and distant futures. Because dirt is both healthy and unhealthy for our bodies, literally and figuratively, we will continue to debate its necessity for as long as we are still at least part human.

Because the female body is especially human from the start, or supposedly composed of more parts nature than culture, new biotechnologies that are designed exclusively for it will disturb our notions of what it means to be a woman. Although most of my interviewees have argued that gender inequality will never relent because women have been treated similarly for millennia, I disagree. The fact that a woman does not have to cycle, let alone have children, shows that the meaning of womanhood has

changed. With the biomedicalization of the female body, we are decreasingly defined by our reproductive capacities and increasingly identified by everything else we accomplish.

Ultimately, the arguments for and against biotechnologies that raise the stakes of medicine the most, that make it either vital or toxic to our individual mortalities and to that of our culture as we know it—of our notions of gender, nature, and progress—will prove the most compelling and resilient. Whether a postfeminist cyborg or “prefeminist” hunter-gatherer, the paradigm of women’s health will always be a step away...

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Table 27. Interviewee Data

Subject #	Primary Occupation	Age	Race/Ethnicity	Hormonal Contraceptives Reported to Have Used*	Skipped? **
1	Graduate Student	27	White, Non-Hispanic	Depo-Provera, Yaz	Yes
2	Nurse, Research Coordinator	N/A	Pacific Islander	Mirena IUD	N/A
3	Nurse, Research Coordinator	N/A	White, Non-Hispanic	ND	N/A
4	Undergraduate	21	White, Non-Hispanic	NuvaRing, Yaz	ND
5	Undergraduate	21	South Asian	Femcon Fe, Tri-Levlen	Yes
6	OB/GYN Researcher, Practitioner	N/A	White, Non-Hispanic	ND	N/A
7	Fertility Specialist	N/A	White, Non-Hispanic	ND	N/A
8	Young Professional	27	White, Non-Hispanic	21/7 Pill, Depo-Provera, NuvaRing	Yes
9	Young Professional	27	White, Non-Hispanic	Ortho Tri-Cyclen, Yaz	Yes
10	Undergraduate	22	White, Non-Hispanic	Loestrin, Loestrin Fe	Yes
11	Undergraduate	20	White, Non-Hispanic	Never Used Any	N/A
12	Undergraduate	28	Black	NuvaRing, 21/7 Pill	No
13	Undergraduate	21	White, Non-Hispanic	Never Used Any	N/A
14	Health Educator	31	White, Non-Hispanic	Seasonale, Ortho Tri-Cyclen, Lo-Ovral	Yes
15	Undergraduate	20	White, Non-Hispanic	Yaz	Yes
16	Graduate Student	27	Hispanic	Apri	No***
17	Graduate Student	27	Black	Never Used Any	N/A
18	General Practitioner	N/A	White, Non-Hispanic	ND	N/A
19	OB/GYN Researcher, Practitioner	N/A	White, Non-Hispanic	ND	N/A
20	Undergraduate	22	White, Non-Hispanic	Never Used Any	N/A
21	Young Professional	27	White, Non-Hispanic	Depo-Provera, NuvaRing, Yasmin, Ortho Tri-Cyclen	Yes
22	Graduate Student	32	Hispanic	21/7 Pill	No
23	Graduate Student	24	East Asian/White	Levlite, NuvaRing	No
24	Graduate Student	25	White, Non-Hispanic	Depo-Provera, Kareva, Ortho Tri-Cyclen, NuvaRing	Yes
25	Young Professional	27	White, Non-Hispanic	NuvaRing, Yaz	No
26	OB/GYN Researcher, Practitioner	N/A	White, Non-Hispanic	ND	N/A
27	OB/GYN Researcher, Practitioner	N/A	White, Non-Hispanic	ND	N/A
28	Undergraduate	44	White, Non-Hispanic	21/7 Pill	No

29	Undergraduate	31	Hispanic	Never Used Any	N/A
30	Undergraduate	21	White, Non-Hispanic	Never Used Any	N/A
31	Undergraduate	24	White, Non-Hispanic	Zovia	No***
32	Cancer Researcher	34	Black	21/7 Pill, Mirena IUD, Ortho Evra (Patch), Seasonique	No***
33	Graduate Student	26	White, Non-Hispanic	Yasmin	No
34	Undergraduate	21	Hispanic	Never Used Any	N/A
35	Undergraduate	23	White, Non-Hispanic	Loestrin 28, Ortho Tri-Cyclen	Yes
36	Undergraduate	39	Black	21/7 Pill	No
37	Undergraduate	19	Black	Kareva	No***
38	Undergraduate	21	White, Non-Hispanic	Depo-Provera, Yaz	N/A
39	Undergraduate	20	Arab	Never Used Any	N/A
40	Undergraduate	26	White, Non-Hispanic	21/7 Pill, Depo-Provera, Mirena IUD, Ortho Evra (Patch)	Yes
41	Undergraduate	28	Black	Kareva	No
42	Undergraduate	18	Hispanic	Never Used Any	ND
43	Undergraduate	24	Hispanic	Mirena IUD, NuvaRing	No
44	Undergraduate	32	White, Non-Hispanic	21/7 Pill, Depo-Provera, Seasonique	No
45	Undergraduate	24	Hispanic	Never Used Any	N/A
46	Undergraduate	19	Black	21/7 Pill	No
47	Undergraduate	19	Hispanic	Never Used Any	N/A
48	Undergraduate	18	East Asian	Never Used Any	N/A
49	Undergraduate	20	White, Non-Hispanic	Never Used Any	N/A
50	Graduate Student	28	White, Non-Hispanic	Ortho Tri-Cyclen, NuvaRing, Seasonale, Yasmin	Yes

* Many subjects could not recall every type of hormonal contraception that they had used or tried

** This column describes whether or not the subject ever skipped a hormone free interval while using 21/7 hormonal contraceptives

*** These subjects were taking hormonal contraceptives at least in part to regulate the cycle. Skipping the hormone-free interval would be counterproductive to their needs

ND = Not Discussed; "21/7 Pill" is used when the subject could not recall which 21/7 regimen she used or had used

The Interview Questions

Below are the lists of questions that I brought to interviews with young women and health care professionals, respectively. Questions were added to the lists throughout the interviewing phase of my fieldwork as I became more familiar with my subject population, as well as my subject matter and the discussions related to it. The lists include all of the questions that I started with and each that I added to my repertoire along the way. Because the interviews were semi-structured, I asked many additional questions spontaneously, such as follow-up questions, that do not appear below. Also, as the interviewing phase of fieldwork progressed, I altered the phrasing of the questions and eliminated a few queries altogether, in order to maximize the authenticity of the data collected. Notably, the second list is shorter than the first. In my experience, interviews with health care professionals are more successful when they are less structured. These informants usually wanted me to listen—in general, they had very specific viewpoints that they want to convey.

Questions for Young Women

How old are you?

Are you as student? Do you have a job?

Has your period ever caused you any discomfort?

Have you ever had to stay home or miss an activity because of your period?

Has your physician ever advised you to take drugs for your period?... Has s/he advised you take a hormonal contraceptive?

Do you use birth control?... Which method or methods?... Why did you make this decision?

Has anyone, other than your doctor, influenced your decisions about birth control?... Who pays for your birth control?

If you are not using a hormonal contraceptive that suppresses bleeding, would you ever consider one?

How many times a year do you think women should menstruate?

Other than to perhaps reassure them that they are not pregnant, do you think that women using hormonal contraceptives need to have bleeding episodes every month?

Do you think that menstruation is a “natural” part of being a woman?... Define “natural.”

Do you think that women would be perceived differently if healthy women of childbearing age did not menstruate regularly? Explain.

Do you think that menstrual suppression might be liberating, or do you think it might be the opposite? Or both? Do you think it could be making women more like men? Is that good or bad?

Why do women menstruate?... Do you think it has any evolutionary advantages?

Anthropological research indicates that hunter-gatherer women only have/had one-third as many periods in their lifetimes as American women do today (the latter menstruate more times largely because they have fewer pregnancies and spend less time breastfeeding, which stops menstruation). Should women be experiencing ~150 or ~450 periods in their lifetimes? Which is more “natural?”

Do you think that it is a good idea to use extended regimen OCs, which reduce a woman’s lifetime number of cycles, for the purpose of mimicking the menstrual careers of our ancestors?

Some of the same bioanthropological research on hunter-gather women’s menstrual careers has led to the creation of Paleolithic diets, such as “The Paleo-Diet,” “The Evolution Diet,” “The Origin Diet,” and “The NeanderThin Diet.” Have you ever heard of these diets?... Do you think this “proto-cultural” form of “natural” is healthy?... Is our culture making our bodies healthier, unhealthier, or neither?... Do you trust biomedicine?

Questions for Health Care Professionals

What type of health care professional are you?

How long have you held your current position?

Do you recommend the use of continuous contraceptives? [If yes] Do you recommend them just for women with menstrual disorders or for all women?... Is age a factor?

Other than to perhaps reassure them that they are not pregnant, do you think that women using hormonal contraceptives need to have monthly bleeding episodes?

Which women are most/least enthusiastic about extended-cycle OC regimens?... Do you see any trends with regards to age,...race/ethnicity,... religious affiliation,... socioeconomic status,... educational level,... professional status,... etc.?

Do you ever discuss both the cultural and biological significance of menstruation with your patients, or just the biological?

Do you think extended-regimen contraceptives are presented the same way in direct-to-consumer and direct-to-physician advertising?

Do you think that menstruation is a “natural” part of being a woman?

Why do women menstruate?... Do you think it has any evolutionary advantages?

Do you ever see anthropological data being used to support medical menstrual suppression?

As you may know, anthropological research indicates that hunter-gatherer women only have/had one-third as many periods in their lifetimes as American women do today (the latter menstruate more times largely because they have fewer pregnancies and spend less time breastfeeding, which stop menstruation). Should women be experiencing ~150 or ~450 periods in their lifetimes? Which is more “natural?”

Do you think that it is a good idea to use extended regimen OCs, which reduce a woman’s lifetime number of cycles, for the purpose of mimicking the menstrual careers of our ancestors?

Some of the same bioanthropological research on hunter-gather women’s menstrual careers has led to the creation of Paleolithic diets, such as “The Paleo-Diet,” “The Evolution Diet,” “The Origin Diet,” and “The NeanderThin Diet.” Have you ever heard of these diets?... Do you think this “proto-cultural” form of “natural” is healthy?

Rice University Survey of Extended Regimen OCs - Women's Version

AGE <input type="radio"/> ① <input type="radio"/> ② <input type="radio"/> ③ <input type="radio"/> ④ <input type="radio"/> ⑤ <input type="radio"/> ⑥ <input type="radio"/> ⑦ <input type="radio"/> ⑧ <input type="radio"/> ⑨	Ethnicity (Choose 1) <input type="radio"/> White <input type="radio"/> Black <input type="radio"/> Hispanic <input type="radio"/> Asian Indian <input type="radio"/> Other Asian <input type="radio"/> Other	Major or Concentration (Choose 1) <input type="radio"/> Humanities <input type="radio"/> Business <input type="radio"/> Engineering <input type="radio"/> Social Sciences <input type="radio"/> Natural Sciences <input type="radio"/> Fine or Performing Arts <input type="radio"/> Other	Highest Degree Completed (Choose 1) <input type="radio"/> Some High School <input type="radio"/> High School <input type="radio"/> Undergraduate Degree <input type="radio"/> Masters Degree <input type="radio"/> Doctoral Degree <input type="radio"/> Other Specialty Degree	Highest Degree Intention (Choose 1) <input type="radio"/> Some High School <input type="radio"/> High School <input type="radio"/> Undergraduate Degree <input type="radio"/> Masters Degree <input type="radio"/> Doctoral Degree <input type="radio"/> Other Specialty Degree
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FYI: In the past, all birth control pills were designed to induce a monthly menstrual period. Today, other options are available. An "extended regimen" birth control pill eliminates or reduces the number of monthly periods.

1. Which of the following methods of birth control do you currently use regularly. (choose all that apply)

<input type="radio"/> the Pill (with the standard 21 days of hormone pills, 7 days of placebo pills)	<input type="radio"/> extended regimen Pills that are designed to reduce the frequency of menstruation (such as Seasonale®)	<input type="radio"/> extended regimen Pills that are designed to completely stop menstruation
<input type="radio"/> the Patch (such as Ortho Evra®)	<input type="radio"/> the ring (such as NuvaRing®)	<input type="radio"/> male condoms
<input type="radio"/> the implant (Implanon™)	<input type="radio"/> an IUD (Mirena® or ParaGard®)	<input type="radio"/> female condoms
<input type="radio"/> a cervical cap	<input type="radio"/> a spermicide	<input type="radio"/> sterilization surgery
<input type="radio"/> withdrawal (pulling-out)	<input type="radio"/> abstinence	<input type="radio"/> other
<input type="radio"/> I am not trying to get pregnant, but I am not using a birth control method	<input type="radio"/> an injectable (such as Depo-Provera®)	<input type="radio"/> a diaphragm
	<input type="radio"/> natural family planning/rhythmic method	<input type="radio"/> I am trying to get pregnant

2. In general, I find/have found menstruation to be (choose 1):

<input type="radio"/> not inconvenient or uncomfortable	<input type="radio"/> very inconvenient or uncomfortable
<input type="radio"/> mildly inconvenient or uncomfortable	<input type="radio"/> so inconvenient or uncomfortable that it is debilitating

3. Which of the following menstrual symptoms have you ever experienced (choose all that apply):

<input type="radio"/> pain/cramps	<input type="radio"/> mood swing/irritability (PMS)	<input type="radio"/> bloating/swelling
<input type="radio"/> heavy bleeding	<input type="radio"/> headaches before or during your period	<input type="radio"/> none of the above

4. Evolutionary biologists and anthropologists have debated the evolutionary advantage of monthly menstruation*. What do you think its purpose might be? (choose 1)

<input type="radio"/> to clean the uterus	<input type="radio"/> it is solely a byproduct of hormonal fluctuations
<input type="radio"/> to save the uterus from having to constantly maintain a fertile lining	<input type="radio"/> none of the above

5. For a woman on the Pill, I suspect that monthly bleeding (choose 1)

<input type="radio"/> has health benefits and is necessary	<input type="radio"/> only serves to reassure a woman that she is not pregnant
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6. The reason that I have chosen extended regimen Pills over the traditional version of the Pill is (choose all that apply):

<input type="radio"/> not applicable (I am not taking an extended regimen Pill)	<input type="radio"/> to alleviate menstrual symptoms (such as pain, bloating, PMS, excessive bleeding, etc.)
<input type="radio"/> to avoid monthly bleeding	<input type="radio"/> because my doctor recommended them

7. I think that women on extended regimen Pills should have at least ___ periods per year (choose 1):

<input type="radio"/> 0	<input type="radio"/> 4	<input type="radio"/> 6	<input type="radio"/> It makes no difference	<input type="radio"/> Women should not be taking extended Pill regimens
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8. I think that monthly menstruation is a natural part of being a woman, and it should not be altered. ☐ True ☐ False

9. Anthropological research indicates that until recently, women only had one-third as many periods in their lifetimes as American women do today** (modern women menstruate more frequently than hunter-gatherer women largely because they have fewer pregnancies and spend less time breastfeeding, which stop menstruation). Which do you think is healthiest?

<input type="radio"/> having around 150 lifetime periods (like hunter-gatherer women)	<input type="radio"/> both are equally healthy
<input type="radio"/> having around 450 lifetime periods (like the average American woman)	<input type="radio"/> both are equally unhealthy

10. Do you think that it is a good idea for women to use extended regimen Pills to reduce their lifetime number of cycles? ☐ Yes ☐ No

11. Which statement applies to you regarding vaginal intercourse?

<input type="radio"/> I have never had vaginal intercourse
<input type="radio"/> I have had vaginal intercourse, but not within the last 3 months
<input type="radio"/> I have had vaginal intercourse in the past 3 months

*Profel, Margie 1993 Menstruation as a Defense Against Pathogens Transported by Sperm. Quarterly Review of Biology 68(3)335-381.
 Strassman, Beverly 1996 The Evolution of Endometrial Cycles and Menstruation. Quarterly Review of Biology 71(2)181-221.

**Eaton, S Boyd et al. 1994 Women's Reproductive Cancers in Evolutionary Context. Quarterly Review of Biology 69(3)353-367.
 Strassmann, Beverly 1997 The Biology of Menstruation in Homo Sapiens: Total Lifetime Menses, Fecundity, and Nonsynchrony in a Natural-Fertility Population. Current Anthropology 38(1)123-129.

Rice University Survey of Extended Regimen OCs - Men's Version

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1. Evolutional biologists and anthropologists have debated the evolutionary advantage of monthly menstruation*. What do you think its purpose might be? (choose 1)
 - ☐ to clean the uterus
 - ☐ to save the uterus from having to constantly maintain a fertile lining
 - ☐ it is solely a byproduct of hormonal fluctuations
 - ☐ none of the above

2. For a woman on the Pill, I suspect that monthly bleeding (choose 1)
 - ☐ has health benefits and is necessary
 - ☐ only serves to reassure a woman that she is not pregnant

3. I think that monthly menstruation is a natural part of being a woman, and it should not be altered.
 - ☐ True
 - ☐ False

4. Anthropological research indicates that until recently, women only had one-third as many periods in their lifetimes as American women do today** (modern women menstruate more frequently largely because they have fewer pregnancies and spend less time breast-feeding, which stop menstruation). Which do you think is healthiest?
 - ☐ having around 150 lifetime periods (like hunter-gatherer women)
 - ☐ having around 450 lifetime periods (like the average American woman)
 - ☐ both are equally healthy
 - ☐ both are equally unhealthy

5. Do you think that it is a good idea for women to use extended regimen Pills to reduce their lifetime number of cycles?
 - ☐ Yes
 - ☐ No

6. Which statement applies to you regarding vaginal intercourse?
 - ☐ I have never had vaginal intercourse
 - ☐ I have had vaginal intercourse, but not within the last 3 months
 - ☐ I have had vaginal intercourse in the past 3 months

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